

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL
OIL WELL ☒ GAS WELL ☐ OTHER ☐
SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
WILLIAM W. WHITLEY

3. ADDRESS OF OPERATOR
1600 Broadway, Suite 1705, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface 545' FNL & 2125' FWL, NE 1/4 NW 1/4
At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Seven Miles southeast of Bluff, Utah

10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 525'

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. None

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
4436' G.L.

23. PROPOSED CASING AND CEMENTING PROGRAM

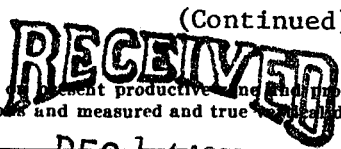
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13-3/8"	32.75 lb.	40'	40 sx.
12-1/4"	8-5/8"	24.00 lb.	900'	350 sx.
7-7/8"	5 1/2"	14 & 15.5 lb.	5600'	150 sx.
-or-				
7-7/8"	4 1/2"	10.5 lb.	5600'	150 sx.

- The well will be spudded in the Morrison Formation.
- The estimated tops of important geological formations are as follows:

Entrada	275	Moen Kopi	2050	Total Depth	5600'
Carmel	325	Cutler	2285		
Navajo	375	Hermosa	4265		
Kayenta	780	Ismay	5173		
Wingate	840	Lower Ismay	5294		
Chinle	1233	"C" Shale	5354		
Shinarump	2035	Desert Creek	5394		

(Continued)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true depths. Give blowout preventer program, if any.

24.  DEC 14 1979
SIGNED Robert W. Peterson TITLE Petroleum Engineer DATE December 11, 1979

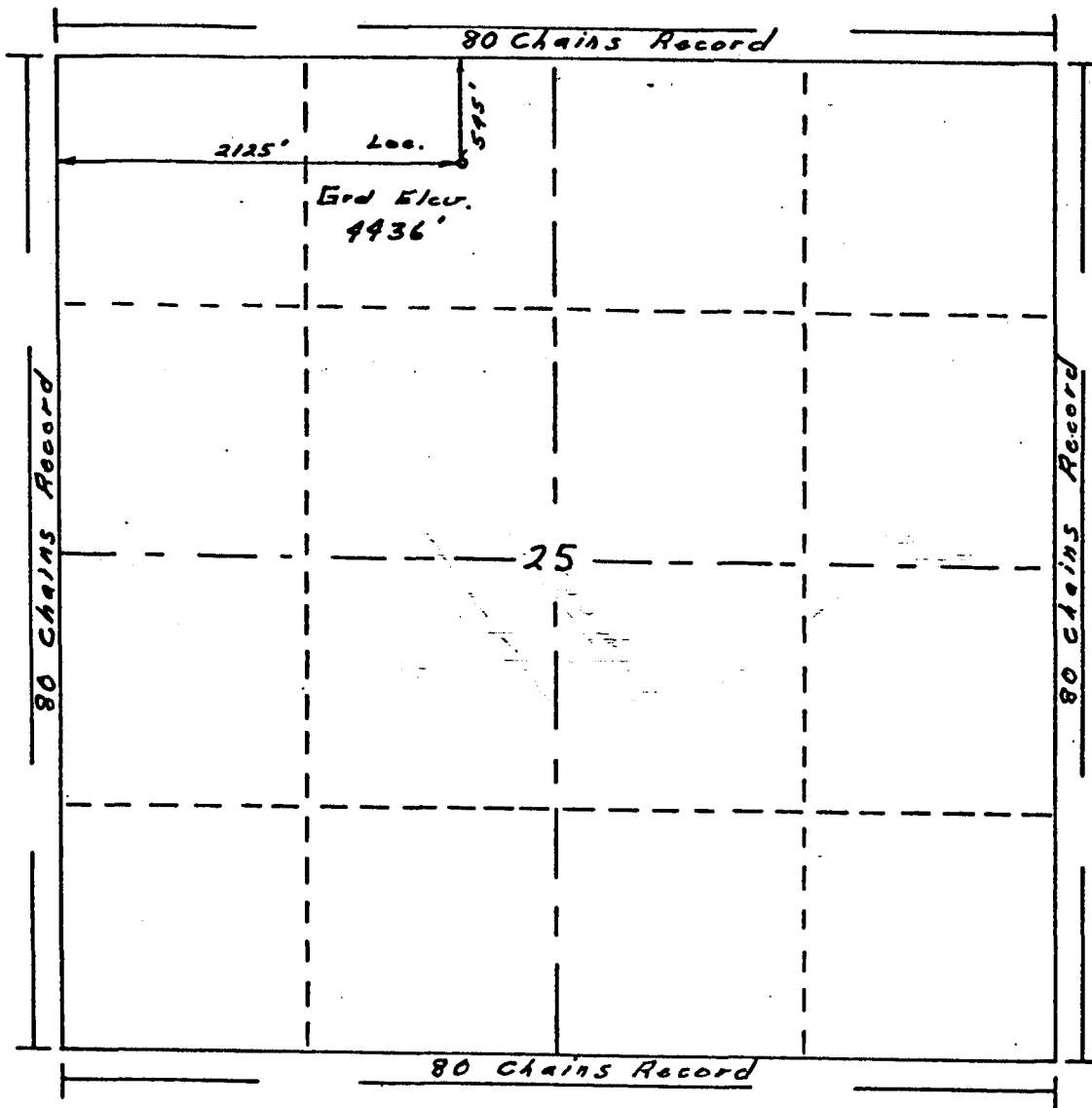
(This space for Federal or State office use)

PERMIT NO. 43-037-30522 APPROVAL DATE Dec 20, 1979

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:



R. 22 E.



T. 40 S.

Scale... 1" = 1000'

Powers Elevation of Denver, Colorado
has in accordance with a request from *Don Mc Chord*
for *Wm. W. Whitely*
determined the location of #1-25 *Kirkwood Federal*
to be 545' ENL. & 2125' ENL. Section 25 Township 40 S.
Range 22 E. Salt Lake Meridian
San Juan County, Utah

I hereby certify that this plat is an
accurate representation of a correct
survey showing the location of

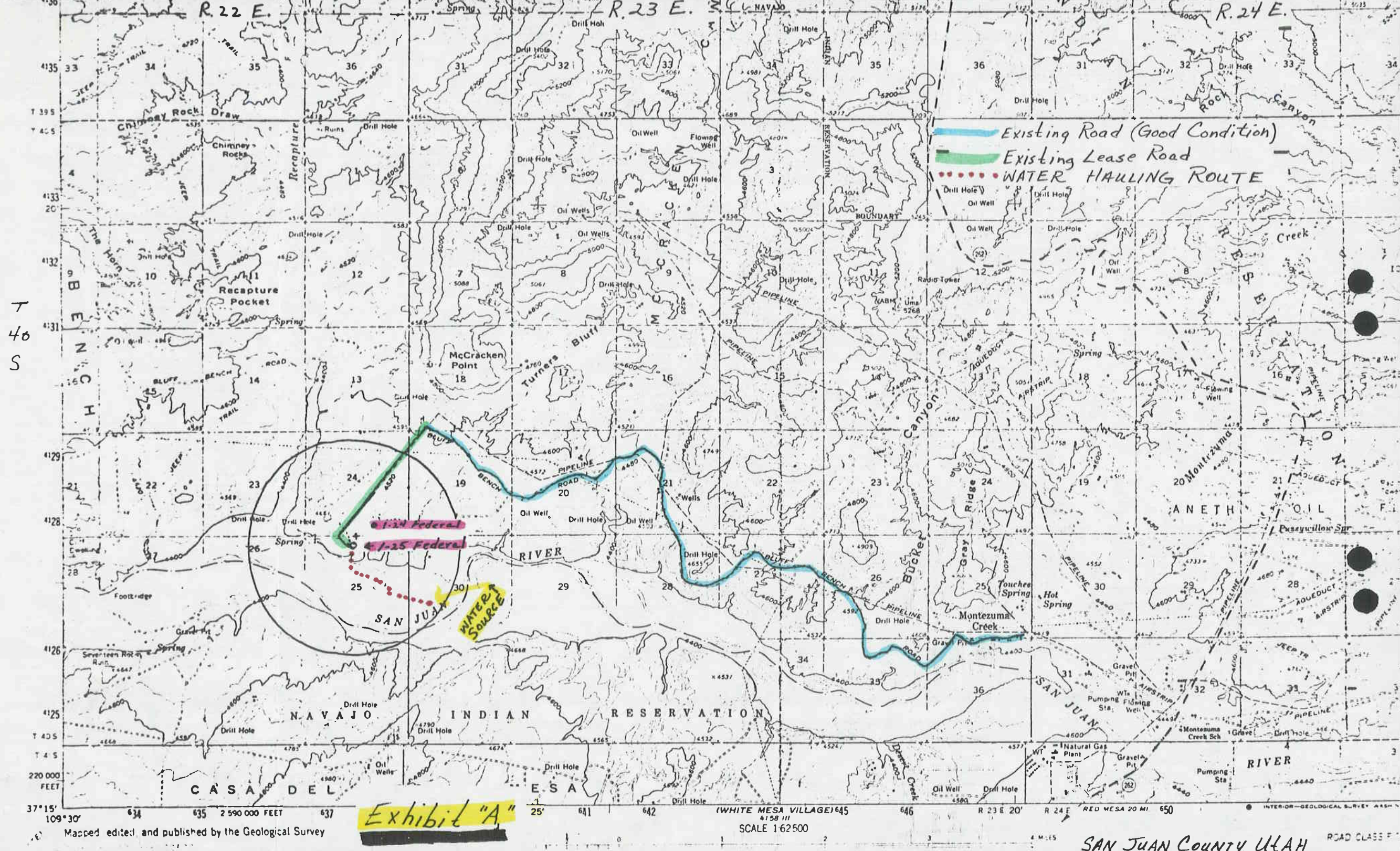
Date: 1 Dec '79

T. Nelson
Licensed Land Surveyor No. 2711
State of Utah

EXHIBIT "B"

P. 23 E.

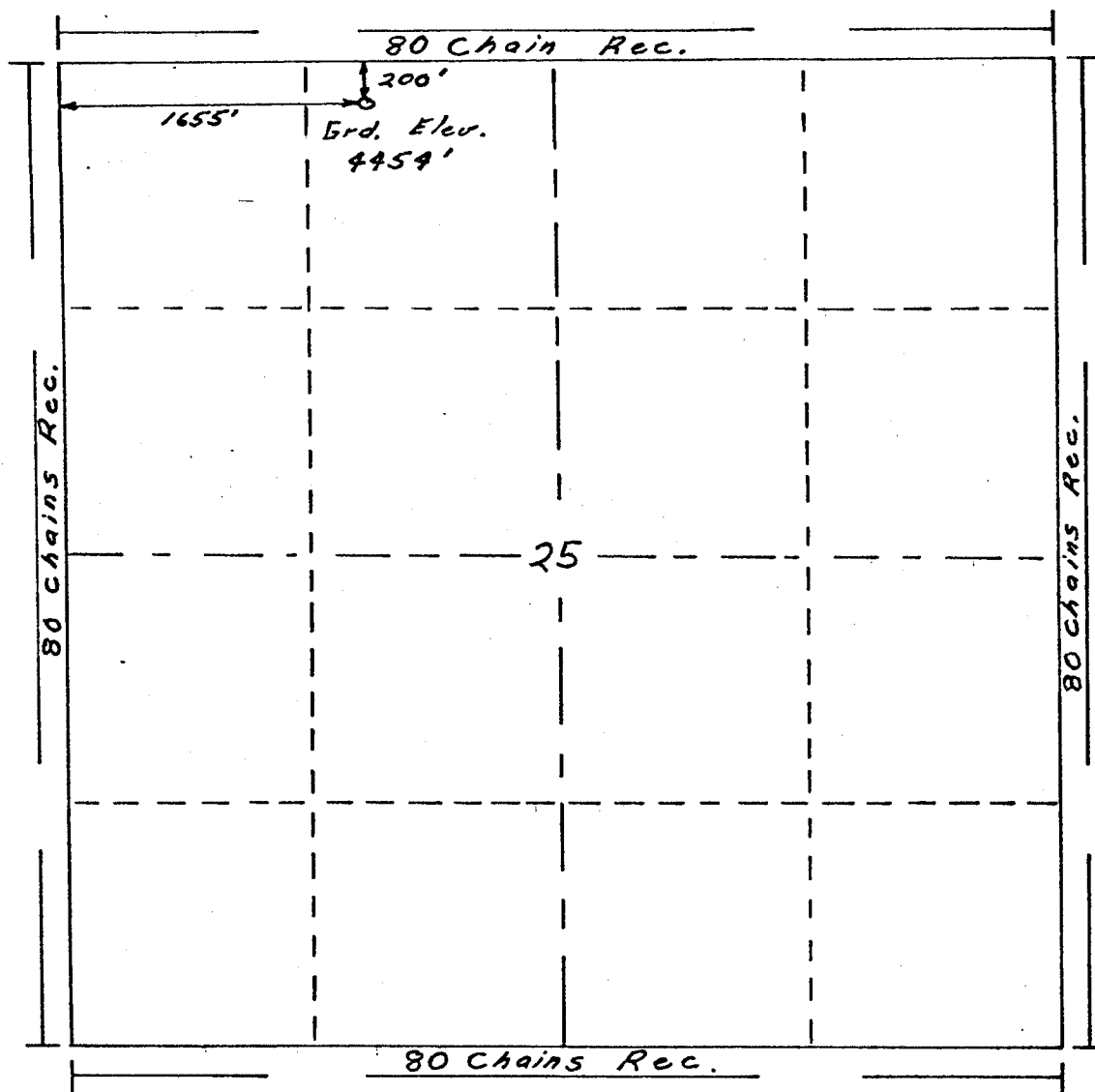




SAN JUAN COUNTY, UTAH



R. 22 E.



T. 40. S

Scale... 1" = 1000'

Powers Elevation of Denver, Colorado

has in accordance with a request from Wm. Whitley
for Wm. Whitley

determined the location of # 1-25 Kirkwood Federal

to be 200' ENL & 1655 FWL

Range 22 East

Section 25 Township 40 South
Salt Lake Meridian

NE NW

San Juan County, Utah

I hereby certify that this plat is an
accurate representation of a correct
survey showing the location of

Date: 28 Dec '79

T. Nelson
Licensed Land Surveyor No. 2711
State of Utah

WILLIAM W. WHITLEY

#1-25 FEDERAL
NE $\frac{1}{4}$ NW $\frac{1}{4}$ (545' FNL & 2125' FWL) Sec. 25, T40S, R22E
San Juan County, Utah

NTL-6 MULTIPOINT REQUIREMENTS

SURFACE USE PLAN

1. Existing Roads

A portion of a U.S. Geological Survey map is attached as Exhibit "A" showing existing roads.

- A. The location plat is attached as Exhibit "B" which shows the location as staked. The well will be drilled in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ (545' FNL & 2125' FWL) of Section 25, Township 40 South, Range 22 East, San Juan County, Utah.
- B. The location is 11.5 miles from Utah State Highway 262 which is paved. The 11.5 miles is on an existing oil field road (Bluff Bench Road) which is used for access to Recapture Creek oil field. The road is shown on the map (Exhibit "A") in blue. The road starts at Montezuma Creek and continues west and connects again with Utah Highway 163 about one mile southeast of Bluff, Utah. Existing road is a pipeline road for last 0.6 mile.
- C. The access road from the existing oil field road is shown in red on Exhibit "A". This existing access road is 1.25 miles from the existing Bluff Ranch Road and is located on a pipeline right-of-way except for the last 0.1 mile.
- D. All existing roads within a one-mile radius are shown on the attached Exhibit "A".
- E. No improvements are planned for the existing access road. As the surface is very sandy, the road should not need any maintenance except for drainage.

2. Planned Access Road

- A. A road presently exists which goes within 30' of the proposed location. No roadwork will be necessary to drill the well. If the well is successful, it may be necessary to blade the road up approximately 18 inches, approximately 20' wide.

- B. The maximum grade will be approximately three percent.
- C. No turnouts will be necessary.
- D. No drainage will be necessary other than the barrow pits created by blading the road if the well is successful.
- E. No culverts or major cuts or fills will be necessary.
- F. No road surfacing materials will be required.
- G. No gates, cattleguards, or fence cuts will be required.
- H. It will not be necessary to build an access road so no flagging will be necessary.

3. Location of Existing wells (Exhibit "C")

For all existing wells within a one-mile radius of this well.

- A. There are no water wells within a one-mile radius of this location.
- B. There are 4 plugged and abandoned wells within a one-mile radius of this location, located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 24, SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 24, NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 30, and SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 23, T40S-R22E.
- C. There are no temporarily abandoned wells within a one-mile radius of this well.
- D. There are no disposal wells within a one-mile radius of this well.
- E. There are no wells presently being drilled within a one-mile radius of this proposed location.
- F. There is one producing well located within a one-mile radius of this proposed well which is located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 24, T40S-R22E, San Juan County, Utah.
- G. There are no shut-in wells located within a one-mile radius of this proposed location.
- H. There are no injection wells located within a one-mile radius of this proposed location.
- I. There are no monitoring or observation wells for other uses located within a one-mile radius of this proposed location.

4. Location of Existing and/or Proposed Facilities

A. Within a one-mile radius of location the following existing facilities are owned or controlled by lessee/operator:

- 1) Tank Batteries: Three 400-Bbl. tanks are installed at the 1-24 Federal well, SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 24, T40S-R22E, San Juan County, Utah.
- 2) Production Facilities: A 4' x 20' treater is located at the 1-24 Federal well, SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 24, T40S-R22E, San Juan County, Utah.
- 3) Oil Gathering Lines: None
- 4) Gas Gathering Lines: None
- 5) Injection Lines: None
- 6) Disposal Lines: None

B. If production is obtained, new facilities will be as follows: A pumping unit, engine, heater treater, separator, flowline and tank battery will be required; the tank battery will be located on the drilling pad.

- 1) The tank battery will consist of two or three 400-barrel welded tanks as shown on Exhibit "D" and a 4' x 20' or 6' x 20' vertical treater. The treater will be located at least 150 feet from the wellhead and the stock tanks will be located at least 150 feet from the wellhead and the treater.
- 2) Exhibit "D" shows the location and dimensions of the proposed facilities.
- 3) The oil and gas flow lines will be 3" fiberglass or steel lines wrapped with a plastic protective coating buried 3 feet deep. The circulating line will be 2" diameter steel line also buried. When the pumping unit is installed, it will be installed on a gravel pad with a wide base.
- 4) The production pit will be fenced. If the well produces over 5 BWPD, the production pit will be lined and flagged unless the water is fresh. The pumping unit will have guard rails installed around the crank weights and belt guards will be installed over the V-belts from the engine to the pumping unit. A siphon pit will be installed ahead of the water disposal pit if the well produces any water.

C. Plan for Rehabilitation of Disturbed Areas no longer needed for Operations:

The reserve pit will be backfilled and recontoured to the original contour as close as practical and the topsoil replaced. If the well is plugged and abandoned, the location will be leveled and the topsoil replaced. All foreign material will be buried in the reserve pit.

The topsoil will be reseeded in a native grass seed mixture recommended by the Bureau of Land Management. The reseeded will be done at the appropriate time of year so that seeds will germinate properly. The same procedure will be followed for the location pad and access road if the well is plugged and abandoned.

5. Location and Type of Water Supply

The drilling water will be hauled by truck from a water hole existing approximately 0.9 mile southeast of proposed wellsite. There is an existing road going directly to the waterhole.

6. Source of Construction Materials

The only construction materials necessary will be gravel purchased from and hauled in by a commercial source for a wide based pumping unit.

7. Method of Handling Waste Disposal

- A. Cuttings: Drill cuttings will be contained in the reserve pit.
- B. Drilling fluids: Drilling fluids will be contained in steel mud tanks and the reserve pit. The reserve pit will be fenced if it cannot be backfilled immediately after the well is drilled.
- C. Any produced oil will be contained in steel swab or test tanks. Produced water, if any, will be contained in the production pit after the well is completed and in swab tanks or the reserve pit until the well is completed and the battery is installed.
- D. Sewage will be disposed in the reserve pit or sanitary holes.
- E. Garbage and waste material will be contained in the trash pit to be dug by a backhoe. The trash pit will be fenced with a mesh fence.
- F. The wellsite will be policed of all foreign material after the drilling and completion rigs are moved off. All trash will be burned or buried. The reserve pit will be backfilled and reseeded.

8. Ancillary Facilities

Not Applicable.

9. Wellsite Layout

- A. See attached Exhibit "D" for cuts and fills in the drillsite location.
- B. The layout of the rig is shown on Exhibit "E".
- C. The rig orientation, parking areas and entrance of access road are shown on Exhibit "E".
- D. The reserve pit will not be lined. The water disposal pit will be lined if the well produces over 5 BWPD.

- E. The location of the production facilities is shown on Exhibit "D" attached.

10. Plans for Restoration of Surface

- A. The reserve pit will be backfilled and recontoured to the original contour as closely as practical and the topsoil replaced. The location will be leveled and topsoil replaced. All foreign material will be buried in the reserve pit.
- B. The topsoil will be replaced and reseeded to native grasses according to the BLM's specifications on all the unused portions of the location and all of the reserve pit. In case of a dryhole the road will be reseeded unless the surface owner wishes to use it.
- C. The reserve pit will be fenced as soon as the rig is moved off and until it is backfilled. The reserve pit will be backfilled as soon as it dries up enough.
- D. If any oil is left on the reserve pit, it will be removed or the pit flagged.
- E. The reserve pit will be backfilled just as soon as it dries up enough and the weather permits. The location will be leveled as soon as the rig moves off if the well is plugged and abandoned or after production operations are suspended if the well is a producer. The topsoil will be replaced and the location will be reseeded when the weather is right after the location is restored.
- F. The well is planned to be drilled during late January if a rig is available. The rehabilitation operations should be completed by early fall.

11. Other Information

- A. The topography in the general area is rough although this location and access road is good. The soil is very sandy and should be easy to doze and should not cause any problems even in prolonged wet weather. The surface of this location is about 60 percent bare, 15 percent golden weed, 5 percent Russian thistle, 5 percent Mormon Tea and 13 percent native grass and 2 percent yucca. The well will be spudded in the Morrison formation.
- B. The surface is very arid and the only thing the land could be used for is sheep grazing. At this particular location the surface is practically all fine blow sand. The surface is owned by the Federal Government.
- C. No occupied buildings, historical sites, cultural sites or archeological sites are evident from inspecting this location or the access roads.

12. Lessee's or Operator's Representative

The Operator's field representative who will be responsible for compliance with the Surface Use and Operations Plan is Robert W. Peterson. Mr. Peterson can be reached by telephone at (303) 861-2470. If Mr. Peterson cannot be reached, Mr. John Steele will be responsible for compliance. Mr. Steele can be reached by telephone at (303) 355-1422.

13. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by William W. Whitley, and William W. Whitley's contractors and subcontractors in conformity with this plan and terms and conditions under which it is approved.


Robert W. Peterson, Petroleum Engineer

Dated: December 11, 1979

RWP:km

Attachments

3. Proposed Casing Program:

- A. Conductor Pipe: 40', 13-3/8", 32.75#, K-55, 8 rd.th., ST&C New casing.
- B. Surface Casing: Approx 900' of 8-5/8", 24#, K-55, ST&C, 8 rd.th., New casing would be run and cemented to surface.
- C. Production Casing: 5 1/2", 14#, and 15.5 #, K-55, ST&C, 8 rd.th., New casing or 4 1/2", 10.5#, K-55, LT&C, 8 rd.th., New casing.

4. Estimated depths of anticipated water, oil or gas zones:

- A. Navajo Sand 375' (Fresh water)
- B. Lower Ismay 5294' (Oil)
- C. Desert Creek 5394' (Oil)

5. The casinghead will be a flanged 8-5/8" x 10", 900 Series, 3000 psi working pressure type. The blowout preventer will be a 10", 900 Series, 3000 psi working pressure with 4 1/2" pipe rams and blind rams with a remote hydraulic closing unit. The blowout preventer arrangement will include a kill line and choke manifold as shown in Exhibit "F" in the schematic diagram. The BOP will be tested to 1000 psi prior to drilling out the cement plug in the surface casing and once during each tour.

6. Clear water with drilling detergent will be used for a circulating medium to about 2600' depth. The well will then be mudded up properly before drilling the Ismay formation. The mud will be a fresh water gel chemical type mud. The mud weight will be maintained at about 9.5 lbs./gal., viscosity 35 to 45 sec./qt., and water loss 6 to 8 cc.

7. The following auxillary drilling equipment will be utilized or available:

- A. Kelly cock
- B. Float valve above bit
- C. A 3,000-psi W.P. full opening valve will be screwed into a 4 1/2" drillpipe sub to be used as a stabbing valve.
- D. No mud monitoring equipment will be used.

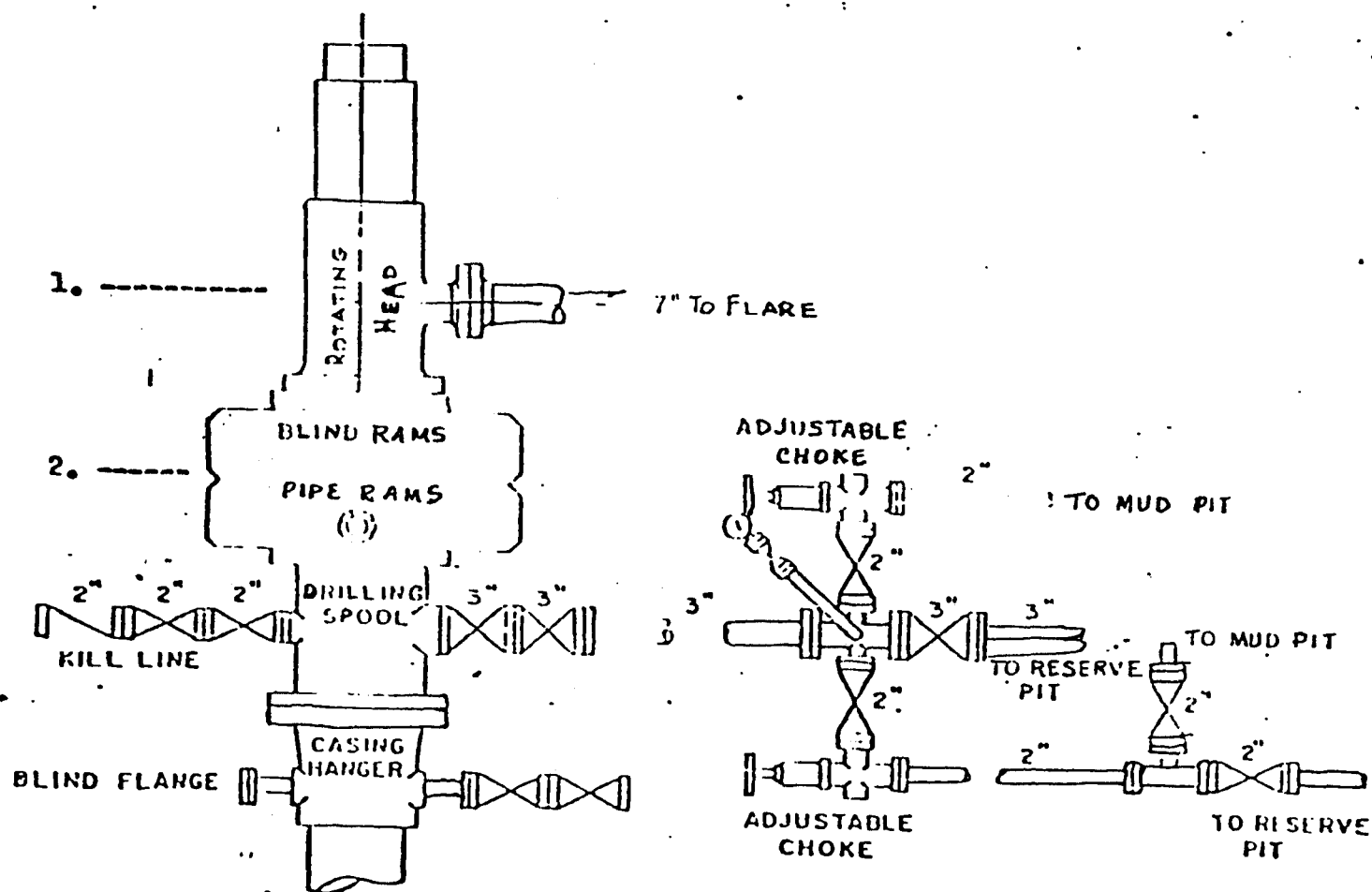
8. No cores are planned on this well. Lower Ismay and Desert Creek porosity with oil shows will be drillstem tested. An Induction Electric log will be run from total depth to the base of any casing. A Borehole Compensated Sonic - Gamma Ray Caliper log will be run over any indicated porosity zones with oil shows.

9. No abnormal pressures or temperatures are encountered in the immediate area. The pressure gradient in the Lower Ismay and Desert Creek porosity zones are about 0.388 psi/ft. depth. No hydrogen sulfide has been encountered in the Ismay, Desert Creek or shallower zones in this area.

10. The perforations in either the Ismay or Desert Creek formations will be acidized unless an adequate flow of hydrocarbons into the wellbore is obtained by perforating only. The acid treatments should not be over 500 gallons of acid per foot of perforations. Normal treating pressures are anticipated. If flammable liquids are

used to treat the well, the pumping equipment will be at least 120 feet from the wellhead and the pumping equipment at least 120 feet from the storage tanks.

11. It is planned to spud this well in the first half of January, 1980.



1. Shaffer Type 51 Rotating Head

2. Shaffer 12" 900 Series Type 48 Double Hydraulic



POWERS ELEVATION COMPANY, INC.

F3°

C3°

F4°

Treater

Flow Line

C0°

Access

X-Section

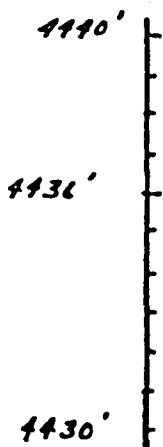
Flow Line & Circulating Line

Tent Battery

F3°

C0°

Horz scale 1" = 50'
Vert scale 1" = 5'



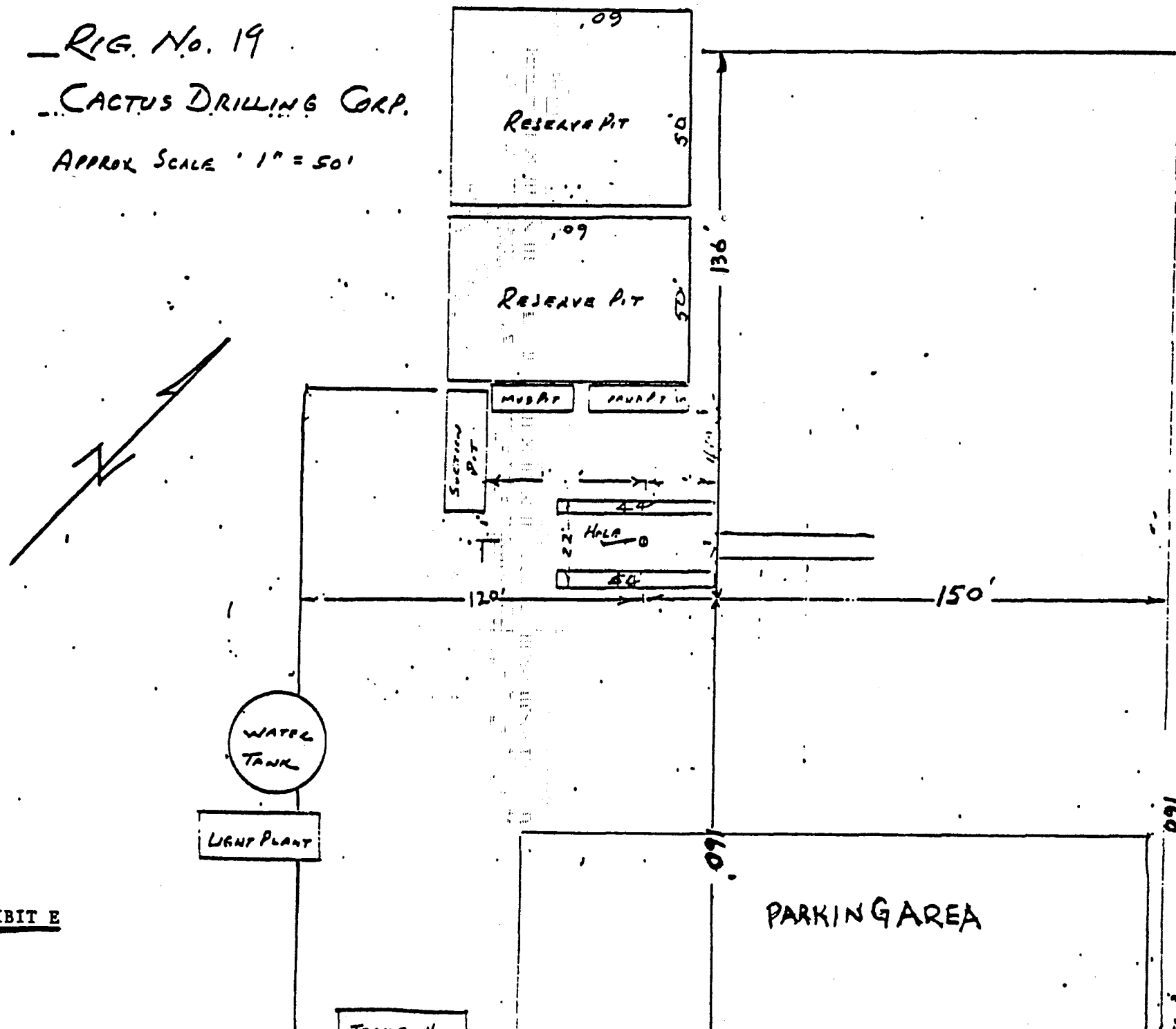
natural ground

EXHIBIT "D"

RIG No. 19

CACTUS DRILLING CORP.

APPROX SCALE ' 1" = 50'



** FILE NOTATIONS **

DATE: December 18, 1979

Operator: William W. Whitley

Well No: Kirkwood Federal 1-25

Location: Sec. 25 T. 40S R. 22E County: San Juan

File Prepared: ☐

Entered on N.I.D.: ☐

Card Indexed: ☐

Completion Sheet: ☐

☒ API Number 43-037-30522

CHECKED BY:

Geological Engineer: _____

Petroleum Engineer: _____

Director: OK

APPROVAL LETTER:

Bond Required: ☐

Survey Plat Required: ☐

Order No. _____

O.K. Rule C-3 ☒

Rule C-3(c), Topographic Exception/company owns or controls acreage within a 660' radius of proposed site ☐

Lease Designation Fed

Plotted on Map ☒

Approval Letter Written ☒

9 sent 12/27/79

#1
KE
PI

December 24, 1979

William W. Whitley
1600 Broadway, Suite 1705
Denver, Colorado 80202

Re: Well No. Kirkwood Federal 1-25
Sec. 25, T. 40 S., R. 22 E.,
San Juan County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil well is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify one of the following:

MICHAEL T. MINDER
Geological Engineer
Office: 533-5771
Home: 876-3001

CLEON B. FEIGHT
Director
Office: 533-5771
Home: 466-4455

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-037-30522.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

Michael T. Minder
Geological Engineer

MTM/pjf
cc: GS

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

WELL INSPECTION RECORD

NAME OF COMPANY: Wm. Whitley

WELL NAME: Kirkwood Fed. #1-25

SECTION: NE NW 25 TOWNSHIP: 40S RANGE: 22E COUNTY: San Juan

DATE: 1-7 1980 LOCATION INSPECTED

TOTAL DEPTH: _____ AT TIME OF VISIT

NAME OF DRILLING CONTRACTOR: _____

RIG NUMBER: _____

COMMENTS:

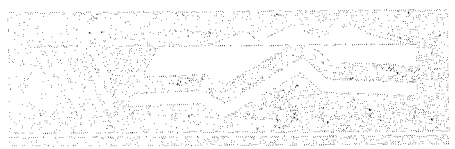
The well is producing at FTP of 300# into a battery made up of three 300
bbl stock tanks which have been diked and fenced as is the heat treater. The
treater pit is filled with crude and should be pumped.

The location is clean and in good condition, however, the reserve pond is
dry and should be backfilled in the near future.

DATE: _____ SIGNED: MTM M. J. M.

SEND TYPED COPY TO COMPANY: YES X No _____

M



RECEIVED

JAN 7 1980

william w. whitley
1705 colorado state bank building
1600 broadway
denver · colorado · 80202
phone (303) 861-2469

DIVISION OF
OIL, GAS & MINING January 5, 1980

State of Utah
Division of Oil, Gas & Mining
1588 West, North Temple
Salt Lake City, Utah 84116

Attn: Mr. Cleon B. Feight

Location change

Re: #1-25 Kirkwood-Federal
NE NW Section 25-T40S-R22E
San Juan County, Utah
U-41696

1655' FWL & 200' FNL, NENW

Dear Mr. Feight:

Our Application for Permission to Drill the subject well was approved by your office on December 24, 1979. A subsequent archeological inspection of the proposed drillsite indicated the presence of an ancient Indian site; therefore, the U.S.G.S. and B.L.M. representatives advised us that the location should be moved approximately 600' northwest. A copy of the revised survey plat is enclosed.

The revised location clearly falls outside of the standard 40-acre pattern. However, for the reasons mentioned above, I am requesting approval of this new location. The Federal Oil and Gas Lease (U-41696) on which the well is to be drilled covers the following lands:

Township 40 South, Range 22 East
Section 24: SW/4
Section 25: N/2NW/4
Section 26: NE/4NE/4

Please advise if you have any further questions about this location.

Very truly yours,

W. Whitley
WILLIAM W. WHITLEY

WWW:sas
Attachment

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: William W. Whitley

WELL NAME: Kirkwood Federal #1-25

SECTION 25 NE NW TOWNSHIP 40S RANGE 22E COUNTY San Juan

DRILLING CONTRACTOR Laughlin Brothers

RIG # 211

SPUDDED: DATE 1/11/80

TIME p.m.

How rotary

DRILLING WILL COMMENCE ASAP

REPORTED BY Sally Scheiman

TELEPHONE # 303-861-2469

DATE January 11, 1980

SIGNED M. J. Munder

cc: USGS



william w. whitley
1705 colorado state bank building
1600 broadway
denver · colorado · 80202
phone (303) 861-2469

January 14, 1980

U. S. G. S.
P. O. Box 1809
Durango, CO 81301

Attn: Mr. Carl Barrick
Acting District Engineer

Re: 1-25 Kirkwood-Federal
TURNER BLUFF PROSPECT
Section 25-T40S-R22E
San Juan County, Utah
U-41696

Dear Mr. Barrick:

Enclosed is the Sundry Notice on the above well, containing the spudding information we did not have when we telephoned you on January 11, 1980.

Very truly yours,

Sally Scheiman

Sally Scheiman
Secretary

/ss
Enclosures 3

✓ cc: Mr. Michael T. Minder,
State of Utah

RECEIVED

JAN 16 1980

DIVISION OF
OIL, GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE*
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-41696

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Kirkwood-Federal

9. WELL NO.

1-25

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

25-T40S-R22E

12. COUNTY OR PARISH 13. STATE

San Juan

Utah

1. OIL ☒ GAS ☐
WELL WELL OTHER

2. NAME OF OPERATOR

WILLIAM W. WHITLEY

3. ADDRESS OF OPERATOR

1600 Broadway, Suite 1705, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)

At surface

200'FNL, 1655'FWL, NE $\frac{1}{4}$ NW $\frac{1}{4}$

14. PERMIT NO.

43-037-30522

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4454' G.L.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) Spudding ☒REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perti-
nent to this work.)*

Spudded well 1-11-80 @ 7:00 P.M.

Ran 22 jts., 966', of 8-5/8", 24#, K-55, 8 rd.th., R-3, surface casing to
940' K.B., cem. w/300 sx. Halliburton lite followed w/160 sx. reg. w/3%
CaCl₂ w/ 3/4 lb. floceal/sk. Plug down 12:20 P.M. 1-12-80.

1-13-80 Depth 960'.

RECEIVED

JAN 16 1980

DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED

William W. Whitley

TITLE

Petroleum Engineer

DATE

1/14/80

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

WILLIAM W. WHITLEY
#1-25 Kirkwood Federal well
NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 25-T40S-R2E
San Juan County, Utah

Contractor: Loffland Bros. Company, Rig No. 211
Elevation: 4454' G.L., 4466' K.B.

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- 1-4-80 Moving into location, preparing to build location.
- 1-7-80 Finished building location pad - plan to start moving in rotary rig today.
- 1-8-80 Moving in rotary, rigging up.
- 1-9-80 Rigging up. Should spud well this morning.
- 1-10-80 Drilling mousehole.
- 1-11-80 Depth 53', drilling rathole. Set 34' of 13-3/8", 48 lb., K-55 casing at 34', cemented.
- 1-12-80 Drilling Rathole.
- 1-13-80 Depth 960'. WO Halliburton. Bit #4: 12 $\frac{1}{4}$ " Reed Y-12, New, 90-960' (870' in 17-3/4 hrs.) Spudded well 7:00 P.M. 1-11-80. Rig time: Drilling 17-3/4 hrs., WO Halliburton 6 $\frac{1}{2}$ hrs.
- 1-14-80 Depth 960', nipples up. Bit #4: 12 $\frac{1}{4}$ " Reed Y-12, New, 90-960' (870' in 17-3/4 hrs.) Ran 22 jts., 966', of 8-5/8", 24#, K-55, 8 rd.th., R-3, surface casing to 940' K.B., cem. w/300 sx. Halliburton lite followed w/160 sx. reg. w/3% CaCl₂ w/ 3/4 lb. floccal/sk. Plug down 12:20 P.M. 1-12-80. Good returns. Pumped 40 sx. regular down annulus. Attempted to pump more but would only pressure up. Water flow @ 600'±. Dev. 1° @ 960'. Rig time: Tripping 1 hr., Circ. 2 hrs., TST $\frac{1}{4}$ hr., Run & cem. csg. 3-3/4 hrs., WOC 6 hrs., NU 11 hrs.
- 1-15-80 Depth 1484', drilling, 524' drilled in 4 hrs. Drlg. w/water. Bit #5: 7-7/8", DG-T Smith, 2/12 jets (blank), 524' in 15 $\frac{1}{4}$ hr. WOB 30,000, 60 RPM, PP 1400, 60 SPM, Liner 5". Rig time: Drilling 15 $\frac{1}{4}$ hrs., tripping 1 $\frac{1}{2}$ hrs., rig serv. $\frac{1}{2}$ hr., NU 5 hrs., pressure test BOP 3/4 hrs., drill cem. plug & shoe 1 hr.
- 1-16-80 Depth 1933', drilling. Drilled 449' in 24 hrs. Fm. Sd., shale. Drilling w/water. Bit #5: DGT, 802' in 24 $\frac{1}{4}$ hrs.; Bit #6: 7-7/8" Smith A-1, 8,10,11/32 jets., 171' in 7 hrs. (in @ 1762') WOB 25,000#, 45 RPM, 1400 PP, 60 SPM, Liner 5". Dev. 3/4° @ 1762'. Rig time: Drilling 19 $\frac{1}{4}$ hrs., tripping 4-3/4 hrs.
- 1-17-80 Depth 2224', WO Halliburton. 291' drilled in 24 hrs. MW 8.4, Vis 38. Bit #6: 7-7/8" Smith A-1, New. 462' on bit in 17 $\frac{1}{4}$ hrs. Had 3" water flow up 8-5/8" casing, recovered chunks of cement, evidently water flowing from Navajo Sand. Cement job on surface casing failed. Rig time: Drilling 10 $\frac{1}{4}$ hrs., tripping 7 hrs., clean pits 1-3/4 hrs., washing off bottom 5 hrs.

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- 1-18-80 Depth 2224', WOC. MW 8.9, Vis. 38. Ran RTTS Packer to 935' KB., Set Packer & pressured annulus to 1000 psi for 10 min. Held OK, no hole in 8-5/8" casing. Pumped down Drill pipe fm., took fluid @ 500 psi very slowly. Increased pressure to 1200 psi and pumped into fm. @ less than 1/4 BPM. Pulled Packer. Ran open-ended drill pipe to 980' K.B., mixed 50 sx. reg. + 2% CaCl₂. Spotted cem. plug on bottom, pulled drill pipe to 385' K.B., displ. 25 sks. cement into fm. @ max. pressure - 200 psi. Staged cem. 3 times at 5 min., 10 min., and 10 min. stages. WOC 11 hrs., WO Halliburton 4 hrs.
- 1-19-80 Depth 2224', WOC. WOC 6 hrs., found top of cem. @ 901' KB., Drilled & Circ. out emt., trip to bottom, had 120' fill, washed out 60' fill & water flow started up 8-5/8" csg. again. Trip out w/bit, ran D.P. open ended to 971' KB, closed BOP & pumped $\frac{1}{2}$ B/M @ 800 psi., mixxed 100 sx. reg w/ fl additive @ 971'. Pulled D.P. to 388' K.B., Closed BOP & pumped cem. into fm. @ P max. = 175 psi. Rig time: Tripping 2 $\frac{1}{4}$ hrs., drilling cem. 3/4 hr., repairs 1 hr., Test BOP $\frac{1}{4}$ hr., cementing 1 $\frac{1}{2}$ hr., circ. cem. $\frac{1}{2}$ hr., WOC 17 $\frac{1}{4}$ hrs. Wash to bottom $\frac{1}{2}$ hr. Staged twice for 10 min., sl. incr. in pressure. WOC 11- $\frac{1}{4}$ Hrs.
- 1-20-80 Depth 2224', washing & reaming to bottom. Fm. Sd., MW 8.7, Vis. 43. Bit #4: 7-7/8" Smith A-1, Jets 1-12, 2-16, New, 1762-2224', 462' in 17 $\frac{1}{4}$ hrs. Ran bit & found top cem. @ 830' KB, drilled & washed thru cem., cem. very green, but samples at surface hard in 2 hrs., started washing & drilling to bottom @ 2104' KB., Hole caving bad. D.P. backed off @ 2190'. Trip out & found 13th stand backed off. Ran in open ended, screwed into fish and came out w/ same. Rig time: Tripping 1-3/4 hrs., WOC 4 $\frac{1}{2}$ hrs., wash out cmt. 1-3/4 hrs., trip to fish 3 $\frac{1}{4}$ hrs., fishing $\frac{1}{4}$ hrs., wash to bottom 12 $\frac{1}{2}$ hrs. Tightened DP joint on trip in. Washed & drilled to bottom. Mixing mud to increase weight & viscosity to stop casing. Unconsolidated sand caving into hole. Water flow appears shut off for now.
- 1-21-80 Depth 2497', tripping in., 273' drilled in 24 hrs. MW 9.5, Vis. 40, WL no control, PH 9.0, FC 2/32, solids 4, PV 5/20. Bit #4: 7-7/8" Smith A-1, jets 1-12, 2-16, New, 1762-2497', 735' in 34 $\frac{1}{2}$ hrs. Bit #5: 7-7/8" Smith F-2, New, in @ 2497'. WOB 25,000#, 48 RPM, 800 PP. Dev. 1 $\frac{1}{4}$ ⁰ @ 2465', rig time: Drilling 17 $\frac{1}{4}$ hrs., tripping 4 $\frac{1}{4}$ hrs., circ. 3/4 hrs., wash to bottom 1 $\frac{1}{2}$ hr., TST $\frac{1}{4}$ hr.
- 1-22-80 Depth 2907', drilling. 410' drilled in 24 hrs. Fm. Sd., Sh. MW 9.6, Vis. 44, WL 12.0, PH 8.0, FC 2/32, Solids 4%, Chl. 9000. Gels 7/10. Bit #5: 7-7/8", Smith S-2, New, 2497-2907' (410') in 23 $\frac{1}{2}$ hrs. WOB 30,000#, RPM 63,000, PP 1500, 53 SPM, Liner 5". Rig time: Drilling 23 $\frac{1}{2}$ hrs., wash to bottom $\frac{1}{2}$ hrs.

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- 1-23-80 Depth 3221', drilling. Drilled 1314' in 24 hrs., Fm. Sh., anhy. MW 9.3, Vis. 38, WL 12.0, PH 11, FC 2/32, solids 4%, Chl 4,000, gels 10/5. Bit #5: 7-7/8", Smith F-2, New, in @ 2497', 724' in 4 1/2 hrs., 17.4'/hr., incomplete. WOB 63,000, RPM 63, PP 1500, SPM 63, Liner 5". Rig time: drilling 18 hrs., tripping 4 1/2 hrs., attempt to unplug bit 1/2 hr., wash to bottom 1/2 hr. Had plugged bit at 3145', tripped in to unplug same. Wash to bottom 3114'-3145', 3100 - 3200'. Lots of anhydrite causing the mud to thicken up badly.
- 1-24-80 Depth 3502', drilling, drilled 281' in 24 hrs. Fm. Sh., anhy. MW 9.3, Vis 43, WL 12, PH 11, FC 2/32, Solids 4%, Chl. 7200, PV 4%, Gels 25/20. Bit #5: 7-7/8" Smith F-2, 2/12 jets, new, 2497-3502', 1005' in 62 1/2 hrs. WOB 32,000#, 63 RPM, PP 1500, 63 SPM, Liner 5". Rig time: Drilling 20-3/4 hrs., tripping 1-3/4 hrs., repairs 1 1/2 hr., wash to bottom 1/2 hr. Tripped at 3318' to look for hole in drillpipe. Washed out nozzle in bit, found hole in drillpipe, 13 stands from surface, 3/8" wide by 1 1/4" long. Tripped back to bottom, had to wash to bottom 3295-3318'.
- 1-25-80 Depth 3796', drilling, 286' drilled in 24 hrs., Fm. Ls., shale. MW 9.3, Vis. 39, WL 12, PH 10, FC 2/32, Solids 4, Chl. 3,000, sd. 1/2, gels 25/15. Bit #5: 7-7/8" Smith F-2, jets 2/12's (1 blank), New 2497-3747', 1250' in 77 hrs. Bit #6: 7-7/8" Smith F-3, jets 2/12's (1 blank), in @ 3747', 49' in 4 1/2 hrs., incomplete. WOB 35,000, RPM 48, PP 1500, SPM 63, Liner 5". Dev. 3515' = 1 1/4", 3747' = 1/2". Rig time: Drilling 18 1/2 hrs., tripping 3 1/2 hrs., TST 1/2 hr., clean shale pit 1 hr., check bit & BOP 1/2 hrs.
- 1-26-80 Depth 4047' drilling. 251' drilled in 24 hrs., Fm. Sh., Lm., MW 4.0, Vis. 38, W.L. 12 PH 10.0, FC 2/32, Solids 4, CL 9,000, gels 10/5., sand 1/2., Bit #6: 7-7/8" Smith F-3, jets 2/12's (1 blank), New, 3745-4047', 302' in 27 3/4 hrs., Rate ft/hr. 10.8 incomplete., WOB 30/35,000, RPM 45 PP 1500, SPM 63, Liner 5", Rig time: drilling 24 hrs.
- 1-27-80 Depth 4323' drilling. 276' drilled in 24 hrs., Fm. Sh./Lm., MW 9.3, Vis. 38 W.L. 12.4, PH 10.0, FC 2/32, solids 5%, CL 10,000, Bit #6: 7-7/8" Smith F-3, jets 2/12's (1 blank), New 3745-4323', 576' drilled in 51 hrs., rte ft/hr. 11.2, WOB 35,000, RPM 48-65, PP 1500, SPM 63, liner 5"., Rig time: Drlg., 23 1/4 hrs., Rig serv. 1/2 hr., Repairs 1/2 hr.
- 1-28-80 Depth 4613' Drilling, 290' drilled in 24 hrs., Fm. sh. & lm., MW 9.3, Vis. 38, W.L. 12, PH 11.0, FC 2/32, solids 5, CL 11,000 Bit #6: 7-7/8", jets 2/12 (1 blank), New 3745-4613', 868' drilled in 75 hrs., rte. ft/hr 11.5, incomplete., WOB 40,000, RPM 45, PP 1500, SPM 63, Liner 5"., Rig time: drlg. 24 hrs.
- 1-29-80 Depth 4808' ^{Tripping} 195' drilled in 24 hrs., Fm. ls. & sh., MW 9.4, Vis. 38, ^{sd. 1/2%} W.L. 12.0 PH 11.0, FC 2/32, solids 4, CL 3800, PV 15, YP 10, Bit #6: 7-7/8", Smith F-3, jets 2/12's (1 blank), New, from 3747'-4808', 1061' in 92 1/2 hrs, rte. ft/hr 11.3, Bit #7: 7-7/8", Smith F-3, 2/13's (1 blank), New, in @ 4808', WOB 40,000, RPM 48, PP 1500, SPM 63, Liner 5" x 16", Strapped out drill pipe, no correction., Rig time: drilling 17 1/2 hrs., tripping 5 hrs, survey 1/2 hr, clean pit 1 hr.

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- 1-30-80 Depth 4987' drilling., 174' drilled in 24 hrs., Fm. limestone, MW 9.3 Vis. 39, W.L. 10.0, PH 10.0, FC 2/32, solids 5, CL 3600, PV 10, YP 10, sand 1/2%, Bit #6: 7-7/8" Smith F-3, jets 2-13's (1 blank) New, 4808' to 4987', 179' in 22 $\frac{1}{4}$ hrs., rte. ft./hr. 8.1, incomplete, WOB 40,000, RPM 48, PP 1300, SPM 63, Liner 5" x 16", On trip had to wash to bottom 4774'-4808' K.B., Rig time: drilling 22 $\frac{1}{4}$ hrs., tripping 1 hr., survey $\frac{1}{2}$ hr., wash to bottom $\frac{1}{4}$ hr.
- 1-31-80 Depth 5183' drilling, 196' drilled in 24 hrs., Fm. ls. & sh., MW 9.4, Vis. 42, W.L. 10, PH 11.0, FC 2/32, solids 5%, CL 1500, PV 15, YP 10, sand $\frac{1}{2}$ %, Bit #6: 7-7/8" Smith F-3, jets 2/13 (1 blank), New, 4808'-5183', 375' in 46 $\frac{1}{4}$ hrs., 8.2'/hr., WOB 40,000, RPM 48, PP 1300, SPM 63, Liner 5", Rig time: drilling 24 hrs.
- 2-1-80 Depth 5400', Circ. for DST #1, 5340'-5400', Fm. lower Ismay, MW 9.4, Vis. 52, W.L. 10, PH 11, FC 2/32, solids 6, CL 45, PV 10, YP 10, Bit #7: 7-7/8" Smith F-3, jets 2/13's New, 4808'-5400', 892' in 68 hrs., 8.7'/hr. WOB 40,000, RPM 48, PP 13, SPM 63, Liner 5" x 16", Sample top Lower Ismay 5324'. Estimated top "C" Shale 5405'. Drilling break 5348-5386', from 7 mpf to 2 $\frac{1}{2}$ -3 mpf. Limestone & dolomite fair to good, vuggy porosity, slight stain, 30% bright - dull fluorescence, faint odor, no cut, gas kick 140 units over 60-80 units background. Should be on bottom w/DST tool by 11:00 AM today. Rig time: drilling 21-3/4 hrs., Circ. 2 hrs., TST $\frac{1}{4}$ hr.
- 2-2-80 Depth 5455', drilling, 55' in 24 hrs. Fm. Shale. MW 9.4, Vis. 42, WL 7.4, PH 10.5, FC 2/32, solids 7, Cl. 5100, PV 15, YP 10, gels 3/13. Bit #8: 7-7/8" Smith A-1, jets 1-8, 1-10, 1-11, rerun, 5400-55', 55' in 4-3/4 hrs., 11'/hr. WOB 35,000, 40 RPM, PP 1300, 63 SPM, Liner 5" x 16". Rig time: Drilling 4-3/4 hrs., tripping 10 hrs., circ. $\frac{1}{4}$ hr., DST #1 8-3/4 hrs., Wash to bottom $\frac{1}{4}$ hr. Sample Top "C" Sh. 5396', Desert Creek 5445' (-976'). Ran DST #1, 5340-5400 (Lower Ismay). Open 10 min., SI 30 min., open 30 min., FSI 60 min. Opened w/strong blow, bottom of bucket in 3 $\frac{1}{2}$ min., GTS in 8 min., flowed mud to surf. in 10 min. after second flow period; flowed oil to surf. in 12 min. of second flow period, continued w/steady increase during flow period; on $\frac{1}{4}$ " choke -520 psi; continued flowing for 32 $\frac{1}{2}$ min. into final shut-in period; reversed out estimated 3035' oil. Reversing tool is 180' above DST tool; recovered 20' water in bottom drill collar.
- Pressures: IFP 779-1006 psi
FFP 971-1825 psi
ISIP 2149 psi, building
FSIP 2124 psi, building
BHT 127⁰F
No BHP
- 2-3-80 Depth 5590', logging. 190' drilled in 24 hrs. Fm. Ls. & sh. MW 9.3, Vis. 42, WL 7.4, PH 10.5, FC 2/32, solids 7, chl. 5100, PV 15. Bit #8: 7-7/8", Smith A-1, jets 1-18, 1-16, 1-11, Rerun, 5400-5590', 190' in 15 $\frac{1}{2}$ hrs., 12.3'/hr. WOB 35,000, 48 RPM, PP 1300, 63 SPM, Liner 5" x 16". Rig time: Drilling 10-3/4 hrs., tripping 4 hrs., rig serv. 1 $\frac{1}{2}$ hrs., circ. 2 hrs., TST $\frac{1}{4}$ hr., logging 3 $\frac{1}{4}$ hrs., W.O. Logger 2 $\frac{1}{4}$ hrs.

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2-3-80 (Continued)

Desert Creek Pay zone: 5500-5517', drilling break from 7 to 3 mpf, 35 U. gas, increase @ top of zone; Spls - Ls., firm, chalky, minor vuggy porosity, slight fluorescence, no stain or odor. Ran Schlumberger DI - SFL & FDC-CNL-GR logs. Schlumberger log tops & calculations:

Ismay	5218'
Lower Ismay	5304 (-835')
"C" Shale	5390 (-921')
Desert Creek	5442 (-973'); 28' high to #1-24 Federal.
Base Desert Creek	5545 (-1006')

Log Calculations:		Neutron Por.	Density Por.	Water Sat.
L. Ismay Zone:	5348-66:	8%	11%	15%
	5370-80"	7%	6%	45%
Desert Creek Zone:	5500-08:	7%	9%	22%
	5511-14:	9%	11%	54%

Preparing to run DST #2, 5480-5514' (Desert Creek).

2-4-80

Depth 5590', running DST #2, 5480-5515'. MW 9.8, Vis. 45, WL 8.0, PH 10.0, FC 2/32, solids 7%, cl. 6200, PV 15, YP .10, gels 3/15. PP 1300, 63 SPM, Liner 5" x 16". TST 5590' - 1-3/4". Rig Time: Tripping 6 1/2 hrs., circ. 3 1/2 hrs., mix mud 4 hrs., logging 4 1/2 hrs., P.U. DST 3 hrs., run DST #2 2 1/2 hrs. Finished running Schlumberger DIL - CNL - FDL. Schlumberger T.D. 5597' KB. Strapped drill pipe, no correction. Water flow started while logging, tripped in w/250 sx. bentonite to increast MW from 9.4 to 9.8#/gal. Trip out. Trip back for DST #2 5478-5517' K.B., straddle test. DST tool open w/ faint blow, 2" in bucket in 3 min., bottom of bucket in 7 min.

2-5-80

Depth 5590', cementing, MW 9.6, Vis. 41, W.L. 8.2, PH 10.0, FC 2/32, solids 7%, CL 3000, PV 20, YP 10, gels 3/14, PP 1300, SPM 63, liner 5" x 16", Finished running DST #2, Tripped in and Circ. hole 1 1/2 hrs., laid down drill pipe, Ran 140 jts., 5608.76' 5 1/2", 14.0-15.5 lb., K-55, ST&C 8 round thread, Range 3, new csng. Cemented at 5589' K.B. w/200sx, 50-50 Pozmix, 2% gel, 10% salt Good returns while cementing, Bumped plug w/2500 PSI, held pressure 10 min., held ok., Displaced plug w/2% KCL water., Plug down 6:10 am. 2/5/80., DST #2: 5480'-5517'. Open 10 min., SI. 60 minutes, open 60 min., SI 120 min., Tool opened w/very weak blow and increases to 2" in bucket in 3 min., & bottom of bucket in 10 min., & remained relatively constant through remainder of test. Rec. 458' total fluid, 120' highly gcm, 330' oil & gas cut mud. (Bottom packer failed),

Pressures:

IHP	2876
FHP	2780
IFP	53-106
FFP	106-199

FSIP	1810
BHT	124°F

Casing perms. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. 684211
Gas gravity _____ Oil gravity _____ GOR _____
Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F





INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

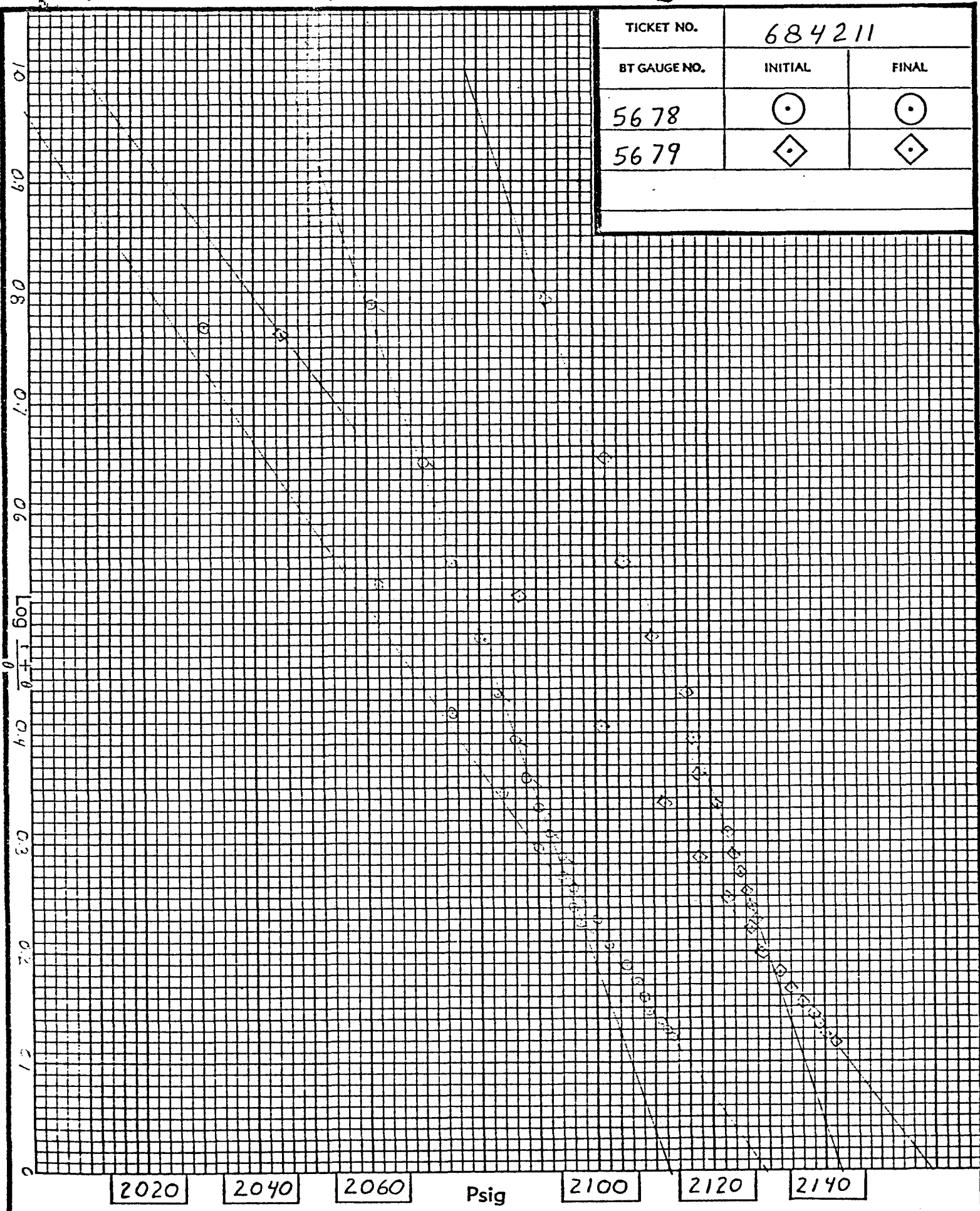
[illegible]

Gauge No. 5678					Depth 5320'			Clock No. 14283			12 hour	Ticket No. 684211			
First Flow Period			First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.
0	.000	763.6	.000	----	976.7	.000	938.5	.000	----	1806.0					
1	.0066	774.5	.0135	.7692	2030.7	.0271*	1044.4	.0275	1.053	2048.5					
2	.0132	739.0	.0271	.5360	2062.1	.0407	1120.9	.0549	.7892	2061.4					
3	.0198	736.2	.0406	.4192	2075.1	.0543	1209.0	.0824	.6468	2069.6					
4	.0264	756.1	.0541	.3463	2084.0	.0678	1307.0	.1099	.5533	2075.1					
5	.0330	783.4	.0677	.2955	2090.1	.0814	1395.6	.1374	.4857	2079.9					
6	.0396	812.8	.0812	.2584	2095.6	.0949	1458.7	.1648	.4341	2083.3					
7	.0462	852.4	.0947	.2297	2099.7	.1085	1521.2	.1923	.3929	2086.0					
8	.0528	888.6	.1083	.2067	2102.4	.1221	1577.3	.2198	.3594	2088.1					
9	.0594	929.6	.1218	.1880	2104.5	.1356	1627.3	.2472	.3314	2090.1					
10	.0660	976.7	.1353	.1725	2106.5	.1492	1669.8	.2747	.3075	2091.5					
11			.1489	.1593	2107.9	.1627	1703.4	.3022	.2870	2093.5					
12			.1624	.1481	2109.2	.1763	1731.4	.3296	.2691	2094.2					
13			.1759	.1384	2110.6	.1899	1758.2	.3571	.2535	2095.6					
14			.1895	.1298	2112.0	.2034	1785.5	.3846	.2395	2096.3					
15			.2030	.1223	2113.3	.2170	1806.0	.4120	.2271	2097.0					

Gauge No. 5679					Depth 5396'			Clock No. 14128			hour	24
0	.000	813.1	.000	-----	1007.5	.000	981.4		.000	-----	1838.1	
1	.0031	797.3	.0067	.7519	2045.3	.0165*	1116.0		.0135	1.057	2077.8	
2	.0062	786.4	.0133	.5226	2087.4	.0231	1202.6		.0269	.7927	2090.9	
3	.0093	790.5	.0200	.4065	2102.6	.0297	1287.2		.0404	.6499	2101.9	
4	.0124	809.0	.0267	.3347	2112.2	.0363	1379.1		.0539	.5559	2105.3	
5	.0155	832.4	.0334	.2851	2118.4	.0429	1448.8		.0674	.4881	2110.1	
6	.0186	855.7	.0400	.2491	2122.5	.0496	1510.3		.0808	.4366	2115.6	
7	.0217	894.2	.0467	.2211	2126.7	.0562	1570.2		.0943	.3953	2117.0	
8	.0248	929.9	.0534	.1988	2129.4	.0628	1617.0		.1078	.3614	2118.4	
9	.0279	963.5	.0600	.1809	2132.2	.0694	1664.5		.1212	.3335	2120.5	
10	.0310	1007.5	.0667	.1658	2134.2	.0760	1703.8		.1347	.3095	2122.5	
11			.0734	.1530	2136.3	.0826	1736.9		.1482	.2888	2123.9	
12			.0800	.1422	2137.7	.0892	1765.8		.1616	.2709	2125.3	
13			.0867	.1328	2139.1	.0958	1792.0		.1751	.2552	2126.0	
14			.0934	.1245	2139.8	.1024	1819.5		.1886	.2411	2127.4	
15			.1000	.1173	2141.8	.1090	1838.1		.2020	.2287	2128.0	
Reading Interval		1	2			2		4				Minutes

REMARKS: * - 4 minutes

TICKET NO.	684211	
BT GAUGE NO.	INITIAL	FINAL
5678		
5679		



EXTRAPOLATED PRESSURE GRAPH

Liquid Production

B.T. Gauge Numbers			5678	5679	Ticket Number		684211
			PRESSURE	PRESSURE			
Initial Hydrostatic			UTR	UTR	Elevation		4466 ft.
Final Hydrostatic			UTR	UTR	1st Flow		1944 bbls./day
1st Flow	Initial	Time	764	813	Indicated Production	2nd Flow	2218 bbls./day
	Final	10	977	1008		3rd Flow	bbls./day
	Closed In Pressure	30	2113	2142		Drill Collar Length	
2nd Flow	Initial		939	981	Drill Collar I.D.		2.25 in.
	Final	32	1806	1838	Drill Pipe Factor		.01422 bbls./ft.
	Closed In Pressure	60	2097	2128	Hole Size		7 7/8 in.
3rd Flow	Initial	Time			Footage Tested		24 ft.
	Final				Mud Weight		9.4 lbs./gal.
	Closed In Pressure				Viscosity, Oil or Water		.73 cp
Extrapolated Static Pressure		1st	2129	2159	Oil API Gravity		43.7 —
		2nd	2112	2143	Water Specific Gravity		—
		3rd			Temperature		127 °F
Slope P/10		1st	1998	2909			
		2nd	2046	2078			
		3rd					

Remarks: Rate may be questionable due to back pressure at surface and the effect of the increasing fluid head in the drill pipe.

Viscosity was corrected using a gas oil ratio calculated from the final surface gas rate and the calculated oil rate.

SUMMARY		B.T. Gauge No. 5678 Depth 5320'			B.T. Gauge No. 5679 Depth 5396'			UNITS
PRODUCT	EQUATION	FIRST	SECOND	THIRD	FIRST	SECOND	THIRD	
Production	$Q = \frac{1440 R}{t}$	2159.26	2330.24		1944.31	2217.88		bbls. day
Transmissibility	$\frac{Kh}{\mu} = \frac{162.6 Q}{m}$	2680.12	5740.85		2107.63	5548.11		md. ft. cp
Indicated Flow Capacity	$Kh = \frac{Kh}{\mu} \mu$	1956.49	4190.82		1538.57	4050.12		md. ft.
Average Effective	$K = \frac{Kh}{h}$	8152.03	17461.75		6410.71	16875.50		md.
Permeability	$K_i = \frac{Kh}{h_i}$	-	-		-	-		md.
Damage Ratio	$DR = .183 \frac{P_s - P_f}{m}$	1.610	.849		1.405	.859		—
Theoretical Potential w/Damage Removed	$Q_1 = Q DR$	3474.86	2330.24		2730.24	2217.88		bbls. day
Approx. Radius of Investigation	$b \approx \sqrt{Kt}$ or $\sqrt{Kt_0}$	285.52	856.39		253.19	841.89		ft.
	$b_1 \approx \sqrt{K_1 t}$ or $\sqrt{K_1 t_0}$	-	-		-	-		ft.
Potentiometric Surface *	$Pot. = EI - GD + 2.319 P_s$	4083.15	4043.72		4076.72	4039.61		ft.

NOTICE. These calculations are based upon information furnished by you and taken from Drill Stem Test pressure charts, and are furnished you for your information. In furnishing such calculations and evaluations based thereon, Halliburton is merely expressing its opinion. You agree that Halliburton makes no warranty express or implied as to the accuracy of such calculations or opinions, and that Halliburton shall not be liable for any loss or damage, whether due to negligence or otherwise, in connection with such calculations and opinions.

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	6"	3"	1'	
Water Cushion Valve				
Drill Pipe	4 1/2"	3.826"	4727'	
Drill Collars	6 1/2"	2 1/4"	579'	
Handling Sub & Choke Assembly				
Dual CIP Valve				
Dual CIP Sampler	5"	.87"	7'	5311'
Hydro-Spring Tester	5"	.75"	5'	5316'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2.25"	4'	5320'
Hydraulic Jar	5.03"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.53"	6'	5334'
Distributor				
Packer Assembly	6 3/4"	1.53"	6'	5340'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars	6 1/2"	2 1/4"	31'	
Flush Joint Anchor	5 3/4"	3.5"	25'	
Blanked-Off B.T. Running Case	5 3/4"	2.44"	4'	5396'
Total Depth				5400'

FLUID SAMPLE DATA				Date				Ticket Number	
Sampler Pressure <u>140</u> P.S.I.G. at Surface				Date <u>2-4-80</u>				Ticket Number <u>684213</u>	
Recovery: Cu. Ft. Gas <u>.5165</u>				Kind of Job <u>OPEN HOLE PACKER, DST</u>				District <u>Hamburton</u>	
cc. Oil <u>1000</u>				ON BOTTOM STRADDLE				District <u>FARMINGTON</u>	
cc. Water				Tester <u>AULD</u>				Witness <u>PETERSON</u>	
cc. Mud <u>1325</u>				Drilling Contractor <u>LOFFLAND BROTHERS</u>				NM S	
Tot. Liquid cc.				EQUIPMENT & HOLE DATA					
Gravity <u>43.7</u> API @ <u>60</u> °F.				Formation Tested <u>Desert Creek</u>					
Gas/Oil Ratio _____ cu. ft./bbl.				Elevation <u>4466'</u> Ft.					
RESISTIVITY _____ CHLORIDE CONTENT _____				Net Productive Interval <u>37'</u> Ft.					
Recovery Water _____ @ _____ °F. _____ ppm				All Depths Measured From <u>Kelly Bushing</u>					
Recovery Mud _____ @ _____ °F. _____ ppm				Total Depth <u>5587'</u> Ft.					
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm				Main Hole/Casing Size <u>7 7/8"</u>					
Mud Pit Sample <u>.925</u> @ <u>74</u> °F. _____ ppm				Drill Collar Length <u>578'</u> I.D. <u>2.25"</u>					
Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm				Drill Pipe Length <u>4865'</u> I.D. <u>3.826"</u>					
Mud Weight <u>9.4</u> vis <u>42 SEC</u>				Packer Depth(s) <u>5474' - 5480' - 5517'</u> Ft.					
				Depth Tester Valve <u>5456'</u> Ft.					
Cushion		TYPE	AMOUNT	Depth Back Pres. Valve		Surface Choke		Bottom Choke	
			<u>NONE</u>			<u>3/4" ADJ.</u>		<u>.75"</u>	
Recovered		<u>120'</u>	Feet of	<u>gas cut mud</u>					
Recovered		<u>338'</u>	Feet of	<u>oil and gas cut mud</u>					
Recovered			Feet of						
Recovered			Feet of						
Recovered			Feet of						
Remarks		<u>NOTE: CHARTS INDICATE BOTTOM PACKERS PARTIALLY SEALING..</u>							
		<u>SEE PRODUCTION TEST DATA SHEET..</u>							
TEMPERATURE		Gauge No. <u>2033</u>	Gauge No. <u>2032</u>	Gauge No. <u>6039</u>	TIME				
		Depth: <u>5460</u> Ft.	Depth: <u>5505'</u> Ft.	Depth: <u>5583'</u> Ft.					
Est. °F.		<u>12</u> Hour Clock	<u>12</u> Hour Clock	<u>24</u> Hour Clock	Tool _____ A.M.				
		Blanked Off <u>NO</u>	Blanked Off <u>YES</u>	Blanked Off <u>YES</u>	Opened <u>0340 P.M.</u>				
Actual <u>124</u> °F.		Pressures		Pressures		Pressures		Bypass <u>0750 P.M.</u>	
		Field	Office	Field	Office	Field	Office	Reported	Computed
Initial Hydrostatic		<u>2727.2</u>	<u>2807.7</u>	<u>2820.5</u>	<u>2828.4</u>	<u>2875.7</u>	<u>2871.5</u>	Minutes	Minutes
First Period	Flow Initial	<u>26.8</u>	<u>46.7</u>	<u>53.0</u>	<u>66.1</u>	<u>94.9</u>	<u>108.4</u>	_____	_____
	Flow Final	<u>80.3</u>	<u>89.5</u>	<u>105.9</u>	<u>103.1</u>	<u>189.8</u>	<u>199.1</u>	<u>10</u>	<u>10</u>
	Closed in	<u>1787.5</u>	<u>1799.4</u>	<u>1809.6</u>	<u>1816.1</u>	<u>1895.7</u>	<u>1905.1</u>	<u>60</u>	<u>61</u>
Second Period	Flow Initial	<u>107.0</u>	<u>152.4</u>	<u>105.9</u>	<u>201.0</u>	<u>230.4</u>	<u>348.2</u>	_____	_____
	Flow Final	<u>187.2</u>	<u>183.1</u>	<u>198.5</u>	<u>198.4</u>	<u>447.2</u>	<u>440.3</u>	<u>60</u>	<u>59</u>
	Closed in	<u>1800.9</u>	<u>1794.1</u>	<u>1809.6</u>	<u>1809.5</u>	<u>1895.7</u>	<u>1898.3</u>	<u>120</u>	<u>120</u>
Third Period	Flow Initial							_____	_____
	Flow Final							_____	_____
Final Hydrostatic		<u>2713.8</u>	<u>2720.4</u>	<u>2740.7</u>	<u>2738.0</u>	<u>2780.1</u>	<u>2780.0</u>	_____	_____

Local Location
Sec. Twp. - Rng.

25 - 40S - 22E

Field Area
Med. From Tester Valve

County

SAN JUAN

State
UTAH

KIRKWOOD FEDERAL

Well No.

Test No.

5480' - 5517'

County

SAN JUAN

State
UTAH

WILLIAM W. WHITLEY

Lease Owner/Company Name

Casing perms _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. **684213**
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F
 INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED _____

Date Time	a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
2230						On location.
2245						Picked up the tool.
0132						Tool on trip in.
0340		*	2 ozs.			Opened tool with a weak blow.
0345		*	4.25 ozs.			
0350		*	21 ozs.			Closed tool.
0450		*	4 ozs.			Reopened tool with a weak blow.
0455		*	2#			
0500		*	3#			
0505		*	3.5#			
0510		*	4.5#			
0515		*	5.25#			
0520		*	6.25#			
0525		*	7#			
0530		*	7.75#			
0535		*	8.5#			
0540		*	9.25#			
0545		*	10#			
0550		*	11#			Closed tool.
0750						Opened bypass - trip out.
1017						Tool out of the hole.
1400						Job completed..
						* BUBBLE HOSE.

WILLIAM W. WHITLEY
Lease Owner/Company Name

684213
Ticket Number
PAGE # 1

B.T. 2033

B.T. 2032

B.T. 6039

Depth 5460'

Depth 5505'

Depth 5583'

12 HOUR CLOCK

12 HOUR CLOCK

24 HOUR CLOCK

P-0
P-1
P-2
P-3
P-4
P-5

Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
FIRST FLOW PERIOD -			FIRST FLOW PERIOD -			FIRST FLOW PERIOD -		
10 MINUTES.			10 MINUTES.			10 MINUTES.		
.000		46.7	.000		66.1	.000		108.4
.014		50.8	.0142		63.4	.034		199.1
.028		69.5	.0284		85.9			
.042		77.5	.0426		95.2			
.056		84.2	.0568		99.2			
.070		89.5	.0710		103.1			
2 MINUTE INTERVALS.			2 MINUTE INTERVALS.					
FIRST CLOSED IN PRESSURE			FIRST CLOSED IN PRESSURE			FIRST CLOSED IN PRESSURE		
PERIOD 61 MINUTES.			PERIOD - 61 MINUTES.			PERIOD- 61 MINUTES.		
.000		89.5	.000		103.1	.000		199.1
.0342		453.2*	.0334		142.8*	.212		1905.1
.0615		849.7	.0602		867.1			
.0889		1287.9	.0870		1320.1			
.1162		1562.8	.1137		1584.6			
.1436		1677.8	.1405		1689.1			
.1709		1731.2	.1672		1747.3			
.1982		1763.3	.1940		1779.1			
.2256		1778.0	.2207		1796.3			
.2529		1787.4	.2475		1805.5			
.2803		1792.7	.2742		1808.2			
.3076		1795.4	.3010		1812.1			
.3350		1796.7	.3277		1813.5			
.3623		1798.1	.3545		1814.8			
.3897		1799.4	.3812		1816.1			
.4170		1799.4	.4080		1816.1			
4 MINUTE INTERVALS.			4 MINUTE INTERVALS.					
* INTERVAL = 5 MINUTES.			* INTERVAL = 5 MINUTES.					
SECOND FLOW PERIOD -			SECOND FLOW PERIOD -			SECOND FLOW PERIOD -		
59 MINUTES.			59 MINUTES.			59 MINUTES.		
.000		152.4	.000		201.0	.000		348.2
.0206		124.3**	.0203		128.3**	.201		440.3
.0482		127.0	.0473		137.5			
.0757		139.0	.0744		149.4			
.1032		147.0	.1014		158.7			
.1307		155.0	.1285		169.3			
.1583		160.4	.1555		171.9			
.1858		164.4	.1826		178.5			
.2133		168.4	.2096		183.8			
.2408		173.7	.2367		187.8			
.2684		176.4	.2637		190.4			

P-0
P-1
P-2
P-3
P-4
P-5
P-6
P-7
P-8
P-9
P-10
P-11
P-12
P-13
P-14
P-15

P-0
P-1
P-2
P-3
P-4
P-5
P-6
P-7
P-8
P-9
P-10

Remarks: SECOND FLOW PERIOD FOR ALL THREE GAUGES CONTINUED ON PAGE # 2

** INTERVAL = 3 MINUTES.

WILLIAM W. WHITLEY
Lease Owner/Company Name

Ticket Number

PAGE # 2

B.T. 6039

Depth 5583'

24 HOUR CLOCK

	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	PSIG Temp. Corr.
	SECOND FLOW PERIOD			SECOND FLOW PERIOD			SECOND FLOW PERIOD		
	CONTINUED...			CONTINUED...			CONTINUED...		
P-11	.2959		176.4	.2908		190.4			
P-12	.3234		176.4	.3178		191.8			
P-13	.3509		180.4	.3449		193.1			
P-14	.3785		180.4	.3719		195.7			
P-15	.4060		183.1	.3990		198.4			
	4 MINUTE INTERVALS.			4 MINUTE INTERVALS.			4 MINUTE INTERVALS.		
	SECOND CLOSED IN PRESURE			SECOND CLOSED IN PRESS.			SECOND CLOSED IN PRESSURE		
	PERIOD- 120 MINUTES			PERIOD-120 MINUTES.			PERIOD-120 MINS.		
P-0	.000		183.1	.000		198.4	.000		440.3
P-1	.0409		533.2	.0402		540.7	.407		1898.3
P-2	.0818		997.3	.0803		998.6			
P-3	.1227		1390.6	.1205		1392.8			
P-4	.1636		1594.9	.1606		1605.8			
P-5	.2045		1684.4	.2008		1698.4			
P-6	.2454		1724.5	.2409		1739.4			
P-7	.2863		1747.3	.2811		1763.2			
P-8	.3272		1760.6	.3212		1776.4			
P-9	.3681		1768.7	.3614		1784.4			
P-10	.4090		1778.0	.4015		1793.6			
P-11	.4499		1784.7	.4416		1800.2			
P-12	.4408		1788.7	.4818		1802.9			
P-13	.5317		1790.1	.5220		1805.5			
P-14	.5726		1792.7	.5621		1806.8			
P-15	.6135		1794.1	.6023		1809.5			
P-16	.6544		1795.4	.6424		1810.8			
P-17	.6953		1795.4	.6826		1810.8			
P-18	.7362		1798.1	.7227		1813.5			
P-19	.7771		1799.4	.7629		1814.8			
P-20	.8180		1794.1	.8030		1809.5			
	6 MINUTE INTERVALS.			6 MINUTE INTERVALS.			6 MINUTE INTERVALS.		

Remarks:

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	6"	3"	1'	
Reversing Sub				
Water Cushion Valve				
Drill Pipe	4½"	3.826"	4865'	
Drill Collars	6½"	2.25"	578'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5.03"	.87"	3'	5447'
Dual CIP Sampler	5.00"	2.75"	4'	5451'
Hydro-Spring Tester	5.00"	.75"	5'	5456'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5.00"	2.25"	4'	5460'
Hydraulic Jar	5.03"	1.75"	5'	
VR Safety Joint	5.00"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.53"	6'	5474'
Distributor				
Packer Assembly	6 3/4"	1.53"	6'	5480'
Flush Joint Anchor	5 3/4"	3.5"	20'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5 3/4"	2.44"	5'	5505'
Drill Collars				
Anchor Pipe Safety Joint	5"	1.5"	6'	
Packer Assembly	6 3/4"	1.53"	6'	5517'
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars	6½"	2.25"	61'	
Flush Joint Anchor	5 3/4"	3.5"	5'	
Blanked-Off B.T. Running Case	5 3/4"	2.44"	4'	5583'
Total Depth				5587'

Daily Report Page 5:

2-5-80 (Continued)

Sampler 140 psi., recovered .5115 cu. ft. gas, 1000 cc oil, 1325 cc foam (mainly oil), Rig time: tripping 5 $\frac{1}{4}$ hrs., Circ. 2 $\frac{1}{4}$ hrs., DST #2 2 hrs., Break test tool 2hrs., Drlg pipe, 4-3/4 hrs., Rig-up, run csng, 7-3/4 hrs.

2-6-80 T.D., 5590', Removed BOP, set slips, cut off 5 $\frac{1}{2}$ " casing, cleaned out mud tanks. Released rig @ 2 P.M. on 2-5-80.

2-7-80 Waiting for rotary rig to move off. Rig won't be moving off until next week sometime.

2-8-80 Shut in, waiting on rotary to move off.

2-11-80 Shut in.

2-15-80 Moving off rotary.

2-16-80 WOCU

2-17-80 WOCU

2-18-80 WOCU, Report suspended until Completion Unit move on location.

3-12-80 Moved in R & R completion rig. Location is very muddy & had considerable difficulty getting rig moved in. Picked up 178 jts. 2-7/8", EUE, K-55, 6.4#, 8 rd.th. used tubing with 4-3/4" bit and casing scraper. Tagged P.B.T.D. at 5551' KB. Plan to perforate Desert Creek 5499-5513' today.

3-13-80 Tripped out with tubing and bit. P.U. seating nipple, ran 2-7/8" EUE tubing to 4112 K.B. R.U. Dresser Atlas and ran Gamma-Ray Correlation Log 5548-4112' K.B. PBTD by logger 5548' K.B. Correlated Dresser Atlas log to Schlumberger Density Neutron open-hole log. Ran tubing to 5538' K.B., ran 2-1/8" diameter glass jets on strip gun, but could not get gun to fall through water in tubing. Swabbed through tubing 5 different times and attempted to run perforating gun each time without success. Pulled perforating gun and re-loaded with 1-11/16" diameter ceramic jets, perforated Desert Creek formation 5500-5514' K.B. w/ 2 jets/ft., total 28 holes. Finished perforating at 6:30 P.M. S.I.O.N.

RECEIVED
MAR 17 1980

DIVISION OF
OIL, GAS & MINING



william w. whitley
1705 colorado state bank building
1600 broadway
denver · colorado · 80202
phone (303) 861-2469

*one copy for
each well file*

March 17, 1980

State of Utah
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Attn: Mr. Michael T. Minder

RECEIVED

MAR 19 1980

DIVISION OF
OIL, GAS & MINING

Re: #1-25 3-E Federal
#2-24 Federal
#1-29A Federal
All in San Juan County, Utah

Dear Mr. Minder:

In response to your telephone call this morning we are forwarding the diagrams for the blowout preventers on the above wells together with the 11-point program (points 3 through 11) to go with the Application for Permit to Drill and land plat which you already have in your office, for each well.

Very truly yours,

William W. Whitley

William W. Whitley

/ss
enclosures 3

FILE IN QUADRUPLICATE
FORM OGC-8-X

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number: #1-25-KIRKWOOD-FEDERAL WELL

Operator: William W. Whitley

Address:

1600 Broadway, Suite 1705
Denver, Colorado 80202

Contractor: Loffland Brothers Co.

Address:

P. O. Box 3565
Grand Junction, CO 81501

Location NE 1/4 NW 1/4; Sec. 25 T. 40 N, R. 22 E; San Juan Co
40 S W

Water Sands:

	<u>Depth:</u>		<u>Volume:</u>	<u>Quality:</u>
	<u>From-</u>	<u>To-</u>	<u>Flow Rate or Head</u>	<u>Fresh or Salty</u>
1.	<u>450'</u>	<u>900'</u>	<u>4 inches</u>	<u>Fresh</u>
2.				
3.				
4.				
5.				

(Continue on Reverse Side if Necessary)

Formation Tops:

Navajo Sand

450'-900'

RECEIVED
MAR 24 1980

Remarks:

DIVISION OF
OIL, GAS & MINING

- NOTE: (a) Upon diminishing supply of forms, please inform this office.
(b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
(c) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

3

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:		OIL WELL <input checked="" type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input type="checkbox"/>	Other <input type="checkbox"/>										
b. TYPE OF COMPLETION:		NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>	DIFF. CESVR. <input type="checkbox"/>	Other <input type="checkbox"/>								
2. NAME OF OPERATOR William W. Whitley															
3. ADDRESS OF OPERATOR 1600 Broadway, Suite 1705, Denver, CO 80202															
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 200' FNL & 1655' FWL (NE $\frac{1}{4}$ NW $\frac{1}{4}$) At top prod. interval reported below same At total depth same															
14. PERMIT NO. 43-037-30522				DATE ISSUED 1-4-80											
15. DATE SPUDDED 1-11-80		16. DATE T.D. REACHED 2-2-80		17. DATE COMPL. (Ready to prod.) 3-28-80		18. ELEVATIONS (DF, R&B, RT, GR, ETC.)* 4455' K.B.		19. ELEV. CASINGHEAD 4439' G.L.							
20. TOTAL DEPTH, MD & TVD 5590' K.B.		21. PLUG, BACK T.D., MD & TVD 5548' K.B.		22. IF MULTIPLE COMPL., HOW MANY* Two		23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS 0-5590'		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 5345-68' K.B. Lower Ismay 5500-14' K.B. Desert Creek							
25. TYPE ELECTRIC AND OTHER LOGS RUN Schlumberger Dual Induction-SFL & Compensated Neutron-Formation Density								26. WAS DIRECTIONAL SURVEY MADE No							
27. WAS WELL CORED No															
28. CASING RECORD (Report all strings set in well)															
CASING SIZE		WEIGHT, LB./FT.		DEPTH SET (MD)		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED					
13 3/8"		45#		34'		17 1/2"		50 SX		None					
8 5/8"		24#		940'		12 1/4"		300 SX Howco Lite & 160 SX reg.		None					
5 1/2"		14 & 15.5#		5589'		7 7/8"		200 SX 50-50 Pozmix w/ 2% gel & 10% salt		None					
29. LINER RECORD										30. TUBING RECORD					
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*		SCREEN (MD)		SIZE		DEPTH SET (MD)		PACKER SET (MD)	
N.A.										2 7/8" EUE		5477' K.B.		5475' K.B.	
31. PERFORATION RECORD (Interval, size and number) 5345-65' K.B. w/ 2 jets/ft w/2" Dia. Bar Kone Golden jets * 5500-14' K.B. w/2 jets/ft w/1-11/16" Dia. ceramic jets										32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.					
										DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED			
										5345-68' K.B.		3000 gals 28% NE Halliburton acid			
										5500-14' K.B.		2500 gals 28% NE Halliburton acid			
33.* PRODUCTION															
DATE FIRST PRODUCTION 3-28-80		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing (Lower Ismay Only)								WELL STATUS (Producing or shut-in) Producing					
DATE OF TEST 4-25-80		HOURS TESTED 24		CHOKE SIZE 12/64		PROD'N. FOR TEST PERIOD OIL—BBL. 225		GAS—MCF. 142		WATER—BBL. 0		GAS-OIL RATIO 631			
FLOW. TUBING PRESS. 575		CASING PRESSURE 0-Packer		CALCULATED 24-HOUR RATE OIL—BBL. 225		WATER—BBL. 0		OIL GRAVITY-API (CORR.) 43.6							
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Vented (Should start selling about 5-1-80)										35. LIST OF ATTACHMENTS Mud Logger Report, DST Reports					
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records										DIVISION OF OIL, GAS & MINING					
SIGNED <u>Robert W. Peterson</u>										TITLE <u>Petroleum Engineer</u>		DATE <u>4/29/80</u>			

* (See Instructions and Spaces for Additional Data on Reverse Side)

* Retrievable Bridge Plug set @ 5440 K.B.

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
See Mud Log attached			

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Chinle	1315	
Shinarump	2050	
Moenkopi	2115	
Cutler	2370	
Hermosa	4318	
Ismay	5218	
Paradox Shale	5398	
Desert Creek	5442	



william w. whitley
1705 colorado state bank building
1600 broadway
denver · colorado · 80202
phone (303) 861-2469

April 30, 1980

CONFIDENTIAL

RECEIVED
MAY 2 1980

U. S. G. S.
P. O. Box 1809
Durango, Colorado 81301

Attn: Mr. Carl Barrick

DIVISION OF
OIL, GAS & MINING 1-25 Kirkwood-Federal
TURNER BLUFF PROSPECT
NENW Section 25-T40S-R22E
San Juan County, Utah

Save out WC's for Ruth

Dear Mr. Barrick:

Enclosed in duplicate you will find:

1. Completion Report on the above well
2. Mud log on the above well
3. Copies of DST #1 and DST #2

Schlumberger should previously have sent you copies of the logs.

We wish to request that you please continue to hold information on this well title.

If there is any other information you need for approval of the Completion Report, please do not hesitate to ask.

Very truly yours,

W. Whitley

William W. Whitley

/ss
Enclosures

✓ cc: State of Utah

CONFIDENTIAL!

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-41696	
2. NAME OF OPERATOR William W. Whitley		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR 1600 Broadway, Suite 1705, Denver, Colorado 80202		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 200' FNL & 1655' FWL (NE/4 NW/4)		8. FARM OR LEASE NAME Kirkwood-Federal	
		9. WELL NO. 1-25	
		10. FIELD AND POOL, OR WILDCAT Turner Bluff	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 25-T40S-R22E	
14. PERMIT NO. 43-037-30522	15. ELEVATIONS (Show whether DF, RT, CR, etc.) 5590' K.B.	12. COUNTY OR PARISH San Juan	13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>

(Other) Co-mingled Zones

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>

(Other) _____

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The Lower Ismay perforations are now flowing intermittently so we plan to remove the retrievable bridge plug @ 5440' K.B. and produce both the Desert Creek perforations 5500-14' K.B. and the Lower Ismay perforations 5345-68' K.B. by co-mingling them in the well bore and pumping the well.

APPROVED BY THE DIVISION
OF OIL, GAS, AND MINING
DATE: 5-11-81
BY: M. J. Minder

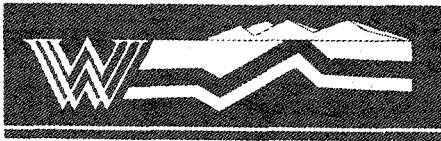
Providing pressures and
hydrocarbons are compatible
between zones.

18. I hereby certify that the foregoing is true and correct

SIGNED William W. Whitley TITLE Operator DATE 4-2-81

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:



william w. whitley
1705 colorado state bank building
1600 broadway
denver · colorado · 80202
phone (303) 861-2469

April 2, 1981

RECEIVED
APR 6 1981

STATE OF UTAH
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116

DIVISION OF
OIL, GAS & MINING

ATTN: Mr. Michael T. Minder

Re: #1-25 Kirkwood-Federal
TURNER BLUFF PROSPECT
200' FNL & 1655' FWL
Section 25-T40S-R22E
San Juan County, Utah

Dear Mr. Minder:

In accordance with our telephone conversation concerning the #1-25 Kirkwood-Federal well, we plan to remove the removeable bridge plug set at 5440' K.B. and produce both the Desert Creek and Lower Ismay perforations by co-mingling them in the well bore. The well is presently producing from the Lower Ismay perforations 5345-68' K.B. by flowing, but the well has started heading and will not flow much longer. The Desert Creek perforations (5500-14' K.B.) flowed on original completion so we intend to test these perforations through tubing set on a packer and then to co-mingle both zones and produce them by installing pumping equipment.

The pumping equipment should produce enough fluid from the well bore to prevent charging the Lower Ismay perforations from the Desert Creek perforations.

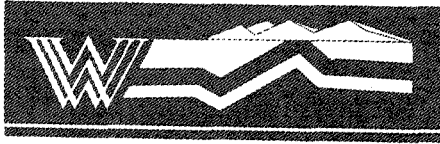
We plan to do this work next week. If you need any further information, please let us know and we will gladly attempt to furnish it.

Very truly yours,

William W. Whitley

WWW:ss

cc: Carl Barrick, USGS



Producing

william w. whitley
1705 colorado state bank building
1600 broadway
denver · colorado · 80202
phone (303) 861-2469

RECEIVED

September 2, 1981

SEP 04 1981

Bureau of Land Management
P.O. Box 1327
Monticello, Utah 84535

DIVISION OF
OIL, GAS & MINING

*Producing
well full*

Re: William W. Whitley
1-25 Kirkwood-Federal
TURNER BLUFF
NE NW Section 25-T40S-R22E
San Juan County, Utah
Lease No. U-41696

Gentlemen:

On August 25, 1981 I advised you by telephone of the occurrence of a small oil spill at the site of the subject well. Summarized below are pertinent details relative to the oil spill and subsequent clean up operations.

On August 21, the 1-25 Kirkwood-Federal well was placed on pump, producing from the Desert Creek and Lower Ismay zones. On August 25 the heater-treater was temporarily overloaded and "kicked out" an estimated 25 barrels of oil into the reserve pit. An estimated 10 barrels of oil overflowed the reserve pit, spread across part of the location pad and road. About 5 barrels of oil flowed into a depression on the down-slope edge of the well location. The balance of the oil seeped into the graded surface of the location pad and road. No active streams or sources of water supply were affected by the oil spill.

During the late afternoon of August 25, our production foreman, with the use of a backhoe and vacuum truck, had commenced clean-up operations. At the end of the following day all of the free oil was recovered and returned to our production tanks. We have taken steps to reduce the likelihood of a recurrence of this incident.

It is evident that no long-term surface damage resulted from the oil spill. If you need any further information, please advise.

Very Truly yours,

William W. Whitley
William W. Whitley

WWW:pa

cc: USGS - Durango/Grand Junction
EPA - Denver
Utah State Oil & Gas Commission - Salt Lake City
William C. Kirkwood
P & M Petroleum Mangement

March 19, 1984

State of Utah
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Change of Operator
U-42474, U-18433, U-52026,
U-23797, U-41696
San Juan County, Utah

Gentlemen:

Upon receipt of a memo from Oil, Gas and Mining's Oil & Gas Information Systems - Development Task Force this date regarding Records Reconciliation - Action Required, I realized I had failed to send Change of Operator forms to the State. Accordingly, enclosed are copies of Change of Operator from William W. Whitley to P & M Petroleum Management on leases U-42474, U-18433 (2 - drillsite acreage and the balance of the acreage) and communitized leases U-52026 with Beard Oil Company's U-23797 Section 25, together with the Successor Operating Agreement between William C. Kirkwood and P & M Petroleum Management covering lease U-41696.

If there is any further information you need, please let me know. I apologize for this oversight.

Very truly yours,

Sally Scheiman
Secretary

/ss
Enclosures

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APR 2 1984

DIVISION OF
OIL, GAS & MINING

~~WHITLEY, WILLIAM W.~~ P + M Petroleum Management (See attached
 1600 BROADWAY, SUITE ~~1705~~ 1700 letter and
 DENVER CO 80202 Sundry
 ATTN: ~~WILLIAM W. WHITLEY~~ notices)
 ROBERT W. PETERSON/JULIE SPURLOCK

PHONE: 303-861-~~2469~~
 2470

YOUR UTAH ACCOUNT NUMBER: N3270

PRODUCING ENTITY NUMBER: 00415
 PRODUCING ENTITY NAME : TURNER BLUFF FIELD

API	ZONE	WELL NAME	SECTION	TOWNSHIP	RANGE	QTR-QTR
43-037-30493	DSCR	1-24 FEDERAL	24	40.0-S	22.0-E	SWSE
43-037-30522	IS-DC	1-25 KIRKWOOD FED.	25	40.0-S	22.0-E	NENW
43-037-30540	ISMY	1-25 3-E FED	25	40.0-S	22.0-E	NENE
43-037-30546	DSCR	2-25 3-E FED	25	40.0-S	22.0-E	SWNE
43-037-30906	DSCR	1-25A KGS FEDERAL*	25	40.0-S	22.0-E	SENE SWNW

* Communitized. Change of Operator still
 pending at BLM.

NOTE: EACH OF THE ABOVE WELLS HAS A
 SEPARATE TANK BATTERY (and meter where
 applicable).

RECEIVED

APR 2 1954

DIVISION OF
 OIL, GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE
(Other instructions on reverse side)Form approved.
Budget Bureau No. 42-R1424.5. LEASE DESIGNATION AND SERIAL NO.
U-42474, U-18433,
U-41696

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input checked="" type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		7. UNIT AGREEMENT NAME	
2. NAME OF OPERATOR William W. Whitley (past) P & M Petroleum Management (current)		8. FARM OR LEASE NAME Kirkwood-Fed	
3. ADDRESS OF OPERATOR 1600 Broadway, Suite 1700, Denver, CO 80202		9. WELL NO. See below 1-25	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface see below		10. FIELD AND POOL, OR WILDCAT Turner Bluff	
14. PERMIT NO. see below		15. ELEVATIONS (Show whether DF, RT, GR, etc.)	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 24, 25, T40S-R22E	
		12. COUNTY OR PARISH San Juan	
		13. STATE Utah	

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) Change of Operator

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

API	WELL	LOCATION	LEASE
43-037-30493	1-24 Federal	24, T40S, R22E - SWSE	U-42474
43-037-30522	1-25 Kirkwood-Federal	25, T40S, R22E - NENW	U-41696
43-037-30540	1-25 3-E Federal	25, T40S, R22E - NENE	U-18433
43-037-30546	2-25 3-E Federal	25, T40S, R22E - SWNE	U-18433

Change Operator on above wells from William W. Whitley, to:

P & M Petroleum Management
1600 Broadway, Suite 1700
Denver, CO 80202
(303) 861-2470
Bob Peterson/Julie Spurlock

RECEIVED

APR 2 1984

DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED Robert W. Peterson TITLE Petroleum EngineerDATE 3/27/84

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

December 12, 1979

State of Utah
Division of Oil, Gas & Mining
1588 West North Temple
Salt Lake City, UT 84116

RE: #1-25 Kirkwood-Federal
NE¹/₄NW¹/₄ Section 25, T40S-R22E
San Juan County, Utah

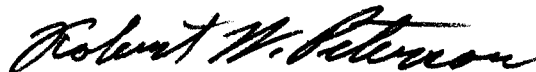
(Lease No. U-41696)

Dear Sirs:

Attached is a copy of the Application for Permit to Drill the subject well which I have previously filed with the U.S. Geological Survey. This copy is for your records.

If you have any questions or need further information, please advise.

Very truly yours,



Robert W. Peterson

KLM

Attachments

RECEIVED

DEC 14 1979

DIVISION OF
OIL, GAS & MINING



PETROLEUM MANAGEMENT

SUITE 1700 • 1600 BROADWAY • DENVER • COLORADO 80202 • PHONE (303) 861-2470

March 28, 1984

State of Utah
Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Attn: Oil & Gas Information System
Development Task Force, Attention Norm Stout

Re: Records Reconciliation

Gentlemen:

In response to your recent Memorandum concerning your development of an automated system for the reporting of oil and gas information, you will find enclosed in triplicate:

- 1) Your computer print-out with written changes noted,
- 2) Letter re Change of Operator to Division of Oil, Gas and Mining dated March 19, 1984,
- 3) Sundry Notice indicating Change of Operator for the 1-24 Federal, 1-25 Kirkwood-Federal, 1-25 3-E Federal and 2-25 3-E Federal wells, and,
- 4) Sundry Notice indicating Change of Operator for the 1-25A KGS Federal well (Communitized).

If there is any further information you require, please let us know.

Very truly yours,

Sally Scheiman
Secretary

/ss
Enclosures

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APR 2 1984

DIVISION OF
OIL, GAS & MINING



UTAH
NATURAL RESOURCES

To: *John*
From: *Vicky*
Date: *9-18-85*

- ☐ For your information and file.
☐ For necessary action.
☐ Reply directly to origin with a copy to this office.
☐ Please draft a reply for signature of _____

_____ and
return by the following date _____.

☒ Other *Shd this be ISMY/*
through 4-2-81, then
IS-DC?

3/80 - 4/81 Ismay only
4/81 - present Ismay /DC

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: U-14696
2. NAME OF OPERATOR: P&M Petroleum Management, LLC		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 518 17th Street CITY Denver STATE CO ZIP 80202		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE: 200' FNL & 1655' FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 25 40S 22E		8. WELL NAME and NUMBER: Kirkwood Federal #1-25
PHONE NUMBER: (303) 260-7129		9. API NUMBER: 037-30522
		10. FIELD AND POOL, OR WILDCAT: Turner Bluff
		COUNTY: San Juan
		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input checked="" type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 6/25/1997	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The well was plugged using operations described on the attached P&A operation cement service report. The location was leveled and covered with top soil and reseeded.

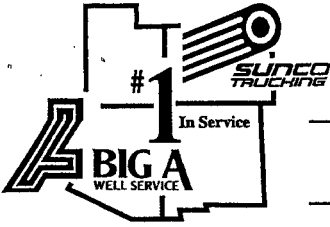
NAME (PLEASE PRINT) <u>Jerry Calley</u>	TITLE <u>Managing Member</u>
SIGNATURE <u>[Signature]</u>	DATE <u>5/17/2010</u>

(This space for State use only)

RECEIVED

MAY 19 2010

DIV. OF OIL, GAS & MINING



P.O. Drawer 3337, 700 S. Tucker, Farmington, New Mexico 87499
(505) 327-4961 • 24-Hour Dispatch (505) 325-6892 • (505) 327-0416

P&A OPERATION CEMENT SERVICE REPORT

WELL NAME: FEDERAL #1-25

TOTAL PLUGS SET: 4

DATE STARTED: 06-18-97

TOTAL SACKS USED: 178 SX.

DATE COMPLETED: 06-25-97

BLM WITNESS: JEFF BROWN

OPERATOR WITNESS: J. BINKLEY

PLUG # 1 (4889' - 5300')

TUBING ANCHOR WOULD NOT RELEASE, CUT OFF TUBING @ 5300' AND SPOT 50 SX CLASS B CEMENT OVER TUBING STUB. SPOT MUD FROM 2450' - 4734'.

PLUG # 2 (2070' - 2450')

RETAINER WAS SET @ 2120' AND FORMATION WAS SQUEEZED WITH 88 SX CLASS B CEMENT, 82 SX WAS BELOW RETAINER AND 6 SX WAS PLACED ON TOP. MUD WAS PLACED FROM 1050' - 2031' WITH 9.0 PPG MUD.

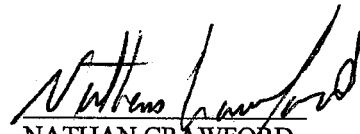
PLUG # 3 (850' - 1060')

CEMENTED WITH 24 SX CLASS B CEMENT. MUD WAS PLACED FROM 843' - 60' WITH 9.0 PPG MUD.

PLUG # 4 (SURFACE - 60')

CEMENT WAS CIRCULATED TO SURFACE WITH 16 SX CLASS B CEMENT, CLEAN OUT BOP'S AND SHUT IN OVER NIGHT.

NOTE: A CAP WAS WELDED ON THE 5 1/2" TO TRY TO SHUT IN CASING. THER WAS A WATER FLOW THAT HAD PUSHED THE CEMENT UP AND APPEARED TO STILL BE LEAKING THE FOLLOWING DAY.


NATHAN CRAWFORD
P&A SUPERVISOR